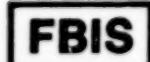


JPRS-UNE-86-008

4 DECEMBER 1986

# USSR Report

NATIONAL ECONOMY



FOREIGN BROADCAST INFORMATION SERVICE

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4 DECEMBER 1986

## USSR REPORT

### NATIONAL ECONOMY

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AGRO-ECONOMICS, POLICY, ORGANIZATION

ECONOMIC FACTORS IN ACCELERATING APK OPERATIONS DISCUSSED

Moscow POLITICHESKOYE SAMOOBRAZOVANIYE in Russian No 8, Aug 86 pp 55-62

[Article by Yu. Savin: "APK: Economic Levers for Acceleration"]

[Text] The reorganization of the management of the agro-industrial complex [APK] recently carried out in our country revealed even more clearly those shortcomings in the management mechanism in the agrarian sector of the economy that were manifested more and more seriously toward the end of the 11th Five-Year Plan. Many of the valid forms of planning, incentives, pricing and financing came about under the conditions of extensive development and the departmental isolation of sectors. They did a poor job of orienting kolkhozes, sovkhozes, other enterprises, and management bodies of agricultural industry toward the efficient utilization of the production potential, the broad incorporation of the achievements of scientific-technical progress, and the provision of the stable development of agriculture and related sectors.

In March 1986, in accordance with the decisions of the 27th CPSU Congress, the CPSU Central Committee and the USSR Council of Ministers adopted a decree "On the Further Improvement of the Economic Mechanism of Management in the Country's Agro-Industrial Complex." The measures that it provides for increase the scope of the economic methods of management in the APK, significantly expand the rights of the kolkhozes, sovkhozes, and other enterprises and organizations in the agricultural industry in the resolution of economic questions, and raise the interest and responsibility of labor collectives and all management links for the intensification of agricultural production and the achievement of high final results.

The main thing now, as was stressed at the June (1986) CPSU Central Committee Plenum, is to make expert use of the advantages built into the new economic mechanism and management structure of the APK. The kolkhozes and sovkhozes, enterprises and organizations of agricultural industry now have broad possibilities for the efficient and rapid development of agricultural production and for the successful resolution of the tasks set by the USSR Food Program.

## Putting Local Resources Into Practice

An extremely important feature of the document adopted by the party is the increase in the responsibility of kolkhozes, sovkhozes and related enterprises as well as territorial management and control bodies for improvement in the provision of the local population with food products. The CPSU Central Committee is putting greater demands on the oblasts and republics for the better provision of food to the people through the maximum utilization of local possibilities.

The appropriate conditions are being established for this. Thus, a departure from old planning principles in the agrarian sector of the national economy is foreseen. Here, just as in other sectors, by the way, the principle of the establishment of planning targets "from the achieved level" prevailed. But it frequently infringed upon the interests of those collectives making efficient use of the resources available to them and, at the same time, it created artificial privileges for managers lacking initiative and for poorly operating farms. Cases of the correction of targets for the sale of output to the state were not overcome and the plans were usually raised for those collectives working well.

The emphasis is now being placed on the development of local initiative and the full utilization of local agricultural resources and raw materials. This will be helped by the normative method of planning, which is being introduced everywhere beginning in 1987. Its essence is that the plans for the purchases of agricultural output, the limits of capital investments, and the deliveries of the basic types of physical resources are established for the kolkhozes and sovkhozes according to standards. The size of the standards is made dependent upon an economic evaluation of the land and the coverage of the farm with fixed production capital, manpower and other resources. In the final analysis, the production potential is determined for each kolkhoz and sovkhoz. And taking this into account, planning targets are established for them.

Some krays and oblasts in the RSFSR, the Ukraine, Belorussia and the Baltic republics have gained experience in the application of the normative method of production planning and it is continuing to spread. Thus, the farms of Kalinin RAPO [rayon agro-industrial association] in Kirghiz SSR began normative planning this year. The production potential of all kolkhozes and sovkhozes was determined. Taking this into account, the planning targets for the production of agricultural output and its sale to the state were increased for the Pobeda kolkhozes imeni Ilich and a number of other farms that previously did not make sufficiently efficient use of their own resources. Having become convinced of the attainability of the limits established for them, the labor collectives actively sought to fulfill the plans. The RAPO management, in turn, helped the farm specialists find real reserves for acceleration, introduce advanced technological methods, improve the composition of the machine and tractor pool, and organize more efficient ties with service enterprises.

Experience has shown that normative planning encourages the labor collectives not to conceal reserves but to reveal them and put them into action and to make a more realistic determination of the needs for equipment, fertilizer and

other resources. Favorable conditions are developing for intrafarm accounting. At the same time, a maximum of competence is being demanded of planning and other agro-industrial bodies as well as scientists and specialists in the development of standards. It is also necessary to train personnel to plan in a new way and, most importantly, to carry out what is planned.

A new system for the sale of agricultural produce to the state is aimed at improving the supply of the local population. Firm plans for the years of the five-year plan are now being established for the rayons and farms. Everything that the kolkhozes and sovkhozes produce beyond this plan can be used by them for their own needs. They are also permitted to sell up to 30 percent of the planned volume of purchases of potatoes, vegetables, fruit, berries, table grapes and cucurbits to consumer cooperative organizations. We recall that previously this share did not exceed 10 percent. This one measure alone makes possible a great increase in the local supplies of these types of food. In many rayons, unfortunately, the managers of farms and agro-industrial associations are still not making proper use of this possibility for the sale of fruit and vegetable production.

Great possibilities arose for soviet and economic authorities of union and autonomous republics, krais and oblasts. Beginning in 1987, only the plans for the deliveries of livestock and poultry, milk, eggs, potatoes, vegetables, cucurbits, fruits and berries, table grapes, citrus fruits and dried fruits to All-Union and republic stocks (or subsidies from them) will be brought up to these administrative units.

This tendency has fundamental importance. The republics, krais and oblasts will have direct responsibility for the improvement of the supply of food products to the population in their territory. For what is produced above the plan for deliveries to the All-Union and republic stocks remains completely at the disposition of local bodies. Consequently, the more is produced in the republic, kray or oblast, the more will reach the stores for sale to the population. At the same time, if the production of some agricultural products or other does not increase in the oblast, kray or republic and the proper campaign is not waged against their losses, then this will have a negative impact on the population's food supply. And the people will know because of whose omission their needs for food products are not being fully satisfied.

Under these conditions, the managers and specialists of the farms and agencies of the agricultural industry need to make a drastic change in the style and methods of their work. They need to be seriously involved in the resolution of questions in the improvement of the supply of food to the population through the maximum utilization of the possibilities of kolkhozes and sovkhozes, the private plots of citizens, collective horticulture, and the subsidiary rural farms of enterprises and organizations.

In a number of oblasts, these questions are being resolved successfully but in many they are not paying the proper attention to them. Let us take the question of the supply of the population with vegetables and potatoes. There are possibilities for the growing of a sufficiently large quantity of them locally in practically every oblast, kray and republic. Meanwhile, some

places have lost interest in the production of these products and are counting on having them delivered from outside. And it turns out that the yield of potatoes per hectare is only 52 on the farms of Kursk Oblast, 70 in Orel Oblast, 78 in Ryazan Oblast, and 81 in Kaluga Oblast. All of these figures are one-half to two-thirds the yield of "second bread" in the country as a whole. During the last five-year plan, cabbage was brought into Ivanovo and Vladimir oblasts and onions were delivered to Yaroslavl and Gorkiy oblasts. Just recently, however, these crops were rightfully the object of the pride of vegetable growers here.

There are similar cases of a parasitic attitude toward the supplying of the population with food products in other regions of the country as well. The managers of a number of oblasts are spending a great deal of time and energy to "extract" additional food stocks from state resources. They are thereby failing to take into account the additional transportation costs, the losses of output, and the worsening of its quality in transport. It is, of course, simpler to act as a "pusher" than to organize the reliable production of food locally. But precisely this second path ensures success. And it comes when the farms and management agencies of the APK put the main emphasis on the intensification of farming and animal husbandry, the consolidation of the base for the transportation, storage, processing and sale of output, and the strengthening of the economic incentive of the workers, from the ordinary worker to the manager.

Good possibilities are now opening up for the deepening of the processes of integration in the APK. The long-range and annual plans provide for the formation of specialized raw-materials zones and the rational distribution of the enterprises of the processing industry. This will be the basis for the establishment of agro-industrial associations, combines and enterprises to ensure the comprehensive utilization of raw materials and the production of high-quality food products and industrial commodities.

The country does have this kind of experience. It is sufficient to refer to the experimental agro-industrial combine "Kuban" established in Timashevskiy Rayon of Krasnodarsk Kray. It was made up of all kolkhozes and sovkhoses, a meat combine, a dairy and a cannery, bread-baking enterprises, and construction, service and trade organizations. The combine is assigned only the volume of deliveries of agricultural produce to the All-Union stock and payments to the budget from profit. The state determines the volume and type of material-technical resources supplied to the combine. All other indicators are determined locally. The size of the wage funds and the amount of development of production and the social and cultural area depends upon final results, that is, the quantity and quality of output sold, its production cost, and profit.

The new management conditions prompted the more efficient utilization of existing resources. At the combine, they are widely introducing intensive technologies and progressive methods for the transport and storage of the output of farming and animal husbandry and are switching to its intensive wasteless processing. The trade enterprises of Krasnodar and Sochi are receiving different vegetables, fruits, juices, sausages, canned goods and other foodstuffs from "Kuban." The prices for them in the stores subordinate



to the combine are somewhat higher than retail state prices. But thanks to their high quality, the products do not remain long on the counters. The combine is taking only the first steps but even they speak of the effectiveness of the chosen course. Following the example of "Kuban" and taking into account local features, similar organizations are being established in Moscow Oblast and other places.

Practice indicates the expediency of having productive capacities for the storage and processing of agricultural produce in the kolkhozes, sovkhoses and enterprises of consumer cooperation. What do such auxiliary shops do? Above all they make it possible to prevent losses of vegetables and fruits as well as other produce, especially the nonstandard part of the harvest. In this way, the farms increase their income and the people receive additional food products.

Private plots are an important source of local food resources. The decree provides for additional measures to strengthen their ties with public production. The development of private plots will be considered in the elaboration of the production and financial plans of the kolkhozes and sovkhoses. The public will be sold more feed grains, coarse and succulent fodder, seeds and planting material as well as hard fuel. It has been decided to achieve the complete satisfaction of the needs of subsidiary plots for young pigs and poultry in the next 2 years. More help will be given in the cultivation of private plots as well as in agrochemical and veterinary services.

Unfortunately, this reserve for the augmentation of food resources is not being properly utilized everywhere. In Ryazan, Gorkiy, Ulyanovsk, Kherson, Mogilev and several other oblasts, the production of milk and meat on private plots even declined in the last 10 years. Meanwhile, this source of supplemental food resources, above all meat, can now be an important aid in public production. Beginning in 1986, livestock and poultry raised on private plots in accordance with contracts will be bought by consumer cooperatives directly from the public or through kolkhozes and sovkhoses. It has been decided to utilize this output primarily for the local supply of the population of cities and industrial and rayon centers at the prices of cooperative trade. Meat produced on private plots and sold to the consumer cooperatives will be attributed to the kolkhozes and sovkhoses toward the fulfillment of the plans for sales to the state. It is now in the interest of the farms to encourage those workers who are actively working in public production and caring for gardens or livestock on their own plots.

As you know, the increase in the production of animal products depends to a decisive degree on feed resources. In recent years, there has been an increase in the amount of grain allocated to fodder purposes. But it is often given to the livestock without enrichment through valuable additives that raise its feed qualities. And a number of places, in allocating more and more grain to fodder purposes, became less involved in the procurement of coarse and succulent fodder. In Yaroslavl Oblast, for example, the share of hay in the structure of feed for dairy livestock declined to less than half of what it was 15 years ago and the share of pasture feed declined to two-thirds of the former level. On the other hand, the relative share of concentrates

doubled. And in the same period, milk productivity per cow not only did not increase but even declined by 500 kilograms.

Unfortunately, this example is not unique. In the Uzbek SSR, they expend 520 grams of concentrates to obtain 1 liter of milk. This is two or three times more than on the country's advanced farms. Here they use 10 kg of feed grain for 1 kg of weight gain in hogs, or double the standard set by livestock management for the use of all types of feed. The situation is similar in Azerbaijan SSR. These facts can be called nothing other than an obvious waste of valuable resources.

The decree of the CPSU Central Committee and USSR Council of Ministers clearly sets forth that the councils of ministers of the union and autonomous republics, the krayispolikoms and oblispolkoms, the gosagroproms of union and autonomous republics, and the agro-industrial committees of the krays and oblasts have full responsibility for the provision of animal husbandry with high-quality concentrated feeds balanced in protein and other components and for their rational utilization. They have been given extensive possibilities for the resolution of this task. Beginning next year, the union republics and not Moscow will determine the volume of the production of concentrated feeds, protein-vitamin supplements and their assortment. It will be necessary to carry out a number of measures to increase the production of vegetable and animal protein and to ensure the complete balance of feed used in animal husbandry by the end of the 12th Five-Year Plan.

Fodder yeast, meat and bone meal, and other high-protein supplements produced above the plan by the enterprises located in the territory of the oblast, kray or republic can be a significant help here. This above-plan fodder now remains completely at the disposition of the local authorities. The farms that sell sunflowers, soybeans and sugar beets to the state now have great possibilities to improve the rations of livestock. Beginning with the current year, in the sale of these products to the kolkhozes and sovkhoses, they will sell concentrated feeds, oil cakes and, through sugar cane, syrup and pulp. In this way, for the country as a whole, the farms will obtain hundreds of thousands of additional tons of feed.

The new standards for the use of feeds beginning in 1987 will help in a more effective campaign for the rational utilization of fodder. Central and local agro-industrial authorities are developing them to reduce the amount of grain used in the production of a quintal of milk, meat or other farm produce. The standards clearly show who is using this valuable resource frugally and who wastefully.

#### From Partial to Full Cost Accounting

The economic approach to the work is the order of the day. The improvement of the economic mechanism in the agrarian sector is aimed entirely at the consolidation and development of cost accounting relations. And it is a matter of affirming not imaginary but real and not partial but full cost accounting and of the transition of all APK links, above all kolkhozes and sovkhoses, to a state of paying for themselves and self-financing.

The first steps have been taken in this direction. Profitability is now over 25 percent in one-third of the kolkhozes and one-fourth of the sovkhoses and over 40 percent on one-tenth of the farms. There are no more unprofitable agricultural enterprises in Estonia, Latvia, Lithuania or in Moscow, Leningrad, Lipetsk, Chernovtsy, Grodnenskiy, Brest and several other oblasts

The overall situation is far from ideal. Many kolkhozes and sovkhoses allow formalism in the introduction of cost accounting and the collective contract and accounting and control is poorly organized. The problems in the efficient utilization of land, equipment, other physical resources, and capital investments are being called priority problems but in practice they are being made secondary. The managers of these farms have developed a frivolous and essentially irresponsible attitude toward the resources allocated by the state. They have become accustomed to getting money from the bank regardless of the fulfillment of plans and regardless of the economic indicators achieved, giving no thought to the repayment of the loans. And it frequently happened that a lagging farm had greater advantages in comparison with an advanced neighbor in its provision with resources in short supply and in the pace of the plan for the sale of produce to the state.

There have been cases where even markups on the purchase prices for unprofitable and hardly-profitable farms were not perceived as an obligation to develop production more efficiently and to make better use of internal reserves but only as an opportunity to cover up cases of poor management and waste. A number of farms of Uzbekistan and Tajikistan used additional sums primarily to increase consumption funds. Is it any surprise that the production of agricultural output is increasing too slowly here?

On many farms, cost accounting was partial. Not even all brigades, groups and links in farming and animal husbandry are being assigned planning targets. And very seldom do cost accounting principles profoundly affect the work of service sections, including the motor vehicle pool, repair shops and processing shops. In addition, they usually remember to control the performance of the task only at the end of the year, when it is too late to correct errors. The unjustifiable attitude toward economy is having a negative effect on final results. The return on investment is declining at kolkhozes and sovkhoses. The production cost of agricultural output again increased significantly in the 11th Five-Year Plan. The number of unprofitable and barely profitable farms is still large.

Life urgently requires the affirmation of effective cost accounting at the kolkhozes and sovkhoses and in all sections of agricultural industry. And the decree of the party and government establishes a real basis for this. Begin with the fact that the kolkhozes and sovkhoses now have greatly increased possibilities to earn their own funds for expanded reproduction as well as for the formation of incentive funds and the resolution of social questions. The party and government prolonged to the 12th Five-Year Plan the payment of additions to the purchase prices for output sold to the state above the level achieved in the last five year plan. And this makes it possible for the country's kolkhozes and sovkhoses to receive additional billions of rubles in earnings.

The economic incentives for grain growers were increased. Stable plans for grain purchases at the level of the 1986 plan were established for the years of the current five-year plan. But this is the minimum amount necessary to supply the country with food and to establish overall state stocks of seeds and other items. Along with this, additional measures were established to increase the sale of grain to the state. Beginning in the current year, the kolkhozes and sovkhoses will be paid not a 50-percent, as before, but a 100-percent markup on the purchase price for grain sold above the average-annual level achieved in the preceding five-year plan. This incentive works if the state plan for the sale of this output is fulfilled. If the farm does not cope with the plan, the markup on the price remains at the old level.

It has been estimated that if the farms of Altay Kray fulfill the current year's plan for the sale of grain to the state, they will receive 170 million rubles in the form of markups on the purchase prices. The profitability of grain production in the kray is 110 percent. For the country as a whole, the economic gain of kolkhozes and sovkhoses is to exceed 1.3 billion rubles if they fulfill the plan for the sale of grain to the state. Other incentives were also established for farms overfulfilling the targets for the sale of grain to the state. In a countersale, they can, in particular, obtain automobiles, tractors, individual types of farm machinery, and building and other materials in short supply.

Kolkhozes and sovkhoses can now increase their income through the sale of part of the planned and the entire above-plan fruit and vegetable production. Those kolkhozes and sovkhoses and other enterprises of the agricultural industry that undertake the processing of fruits and vegetables and the production of new types of foodstuffs enjoying increased public demand (juices, fruit drinks, jams, preserves, etc.) will be encouraged. These products can be sold at stimulatory prices through the stores of the agro-industrial system. Up to half of the profit obtained from their sale is entered in the fund for social and cultural measures. In this way, the one showing initiative has the possibility of more rapidly improving the standard of living of the farm collective.

Substantial changes are being made in the system of the economic incentives for APK workers. In accordance with the decree of the party and state, a wage fund will be established at the sovkhoses. Previously monetary funds were allocated to them in a centralized manner, basically according to the principle "from the achieved level." The sum frequently depended more upon the "penetrating power," the persistence of the sovkhos director and not upon successes in the development of the farm's economy.

The sovkhos collective now must earn the wage fund. Beginning in 1987, it will be established by the farms according to stable standards per 100 rubles of sold (gross) agricultural output. The saved part of the wage fund was previously withdrawn but now it will remain at the disposition of the collective and will supplement the economic incentive fund and the reserve fund. And if there is an overexpenditure of funds? The farm will have to make up for it through its own resources--the economic incentive fund and the reserve fund--and, if they are not sufficient, through part of the bonuses intended for the collective.



To increase wages, it is essential to increase production, raise labor productivity, provide for a better distribution of responsibilities, and lower the cost of the management system. There are considerable reserves here. This work is already being carried out in some rayons. Thus, the farms of the Tyulgan RAPO in Orenburg Oblast reduced their work forces by 129 workers last year with an annual saving in the wage fund of more than 200,000 rubles. At some farms up to that time, as much as 41 percent of the wage fund went for the salaries of managers, specialists and service personnel. A careful analysis showed the possibility of assigning to one person the duties of two or even three specialists previously having light loads. The freed workers headed brigades, departments and other responsible sections or went directly to workplaces. The work only gained from this.

The interest of farmers and stock breeders in increasing production is now growing. Thus, there has been an increase in the number of agricultural sectors permitted to set the valuations for output proceeding from the scheduled wage fund increased up to 150 percent depending upon the increase in the yield of agricultural crops and the productivity of livestock and poultry. Contract collectives will be given up to 25 percent of the output obtained above the amount determined by contract in the form of payment in kind.

Good incentives have been established for those people working under the conditions of a personal or family contract. This form of organizing the production of agricultural output and the remuneration of labor is worthy of serious attention. In the Estonian SSR, they practice it on small farms, entrusting the family with the entire complex of work in looking after livestock. Some suburban vegetable-growing farms in the Moldavian SSR enter into contracts with individual workers and employees for the cultivation and harvest of crops that are still labor-intensive. If the matter is organized properly, both sides entering into contractual relations gain.

We note that the party documents emphasize the necessity of making widespread use of precisely the cost-accounting contract. Unfortunately, contract collectives of kolkhozes and sovkhoses are frequently assigned only a target for the amount of output to be produced and no consideration is given to the price of achieving the result. To a considerable extent, this was explained by the fact that previously bonuses for saving resources did not amount to even 1 percent of the annual wages of workers and kolkhoz farmers. The situation is now changing: up to 70 percent of the expenditures saved by a brigade or farm department will be used to pay bonuses to the collective. An overexpenditure of funds will have to be made up.

It is important to select an efficient form of intrafarm accounting that would encourage the thrifty to the greatest extent possible. The remuneration of labor from gross income has such an "anti-expenditures" character under today's conditions. It is also recommended by the decree of the party and government. Its essence is that the wage fund of the brigade (farm department or link) is determined as a previously established part of gross income that represents the difference between the value of the output produced by the collective and the physical expenditures. It is not difficult to see that the

brigade has an interest in producing as much output of the best quality (it is valued higher) with the least expenditure of fuel, feed and other resources.

Last year, using these principles, Za Mir Kolkhoz in the Lithuanian SSR increased the production of output by 11 percent, reduced its production cost by 4 percent, lowered the expenditure fuels and lubricants by 14 percent and spare parts by 34 percents. Kazminskiy Kolkhoz in Stavropol Kray, which has applied this form of incentives for 10 years now, has achieved enviable results. During the 11th Five-Year Plan alone here, gross output increased by a factor of 1.7, labor productivity by a factor of 1.5, gross income by a factor of 2, and wages by a factor of 1.4.

Of fundamental importance is the decision on a new system for remunerating the labor of the managers and specialists of kolkhozes and sovkhoses. Heretofore their wages at most farms depended little or not at all upon final results. They have now begun to remunerate the labor of farm managers according to estimates (standards) established from the amount of sold (gross) output. And prior to a final accounting, the managers and specialists will receive an advance equal to 80 percent of the established salary.

The system for the payment of bonuses to management personnel is also undergoing significant change. Previously they could, without concerning themselves with the efficient work of farms as a whole, receive solid compensation for an increase in individual indicators or for greater attention to individual crops. Now the awards are made directly dependent upon the profitability of the enterprise.

The combination of economic interest and responsibility is a characteristic feature of all sides of economic activity under contemporary conditions. Thus, the rights of the enterprises of agricultural industry to use their own resources have been greatly expanded. Sovkhoses can now use all financial resources available to them to finance planning measures, regardless of the sources of their formation. Profit was formerly distributed in a strictly determined percentage and for strictly determined objectives. In the process, a large part of it was taken from the best farms and was used to cover the losses of those lagging behind. This lowered the economic interest of both sides in increasing the efficiency of production. Now the payments of sovkhoses to the budget can be put on a normative cost-accounting basis. The farms can use the largest part of their profit at their own discretion. It has also been established that, as a rule, kolkhozes, sovkhoses and other agricultural enterprises carry on new construction using their own resources and bank loans.

Centralized reserve funds can be established in the management bodies of the APK, from the RAPO to the USSR Gosagroprom. They are designated for the development of interfarm enterprises for the production, processing and storage of agricultural output and other specialized enterprises. It will also be possible to apply resources from reserve funds to equalize the management conditions of the enterprises and to help farms that have suffered natural disasters. It was decided to establish reserve funds through the allocation of resources by sovkhoses, kolkhozes (with their approval) and other enterprises and organizations of the USSR Gosagroprom.

The organizational and economic reorganization of the management of agricultural industry also requires profound changes in the style and work methods of party, soviet and economic authorities as well as farm managers and specialists. What are needed are specific actions, specific changes for the better, and the generalization and introduction of experience in reorganization. Precisely practice helps develop enterprise, creative boldness, competence and profound economic thought.

One must act promptly. At the June (1986) CPSU Central Committee Plenum, special note was made of the fact that this year's results in the agricultural sector are extremely important for us. It is essential to bring in a complete

harvest of the mature crop and store it without losses. All reserves must be mobilized to obtain the greatest results from the economic potential developed in rural areas and to make a worthy contribution to the realization of the decisions of the 27th CPSU Congress.

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AGRO-ECONOMICS, POLICY, ORGANIZATION

UDC 631.15:658.589

VASKhNIL PRESIDENT ON S & T USE IN APK

Moscow EKONOMIKA SELSKOGO KHOZYAYSTVA in Russian No 9, Sep 86 pp 11-19

[Article by A. Nikonov, academician, VASKhNIL president, deputy chairman of the USSR Gosagroprom: "Scientific and Technical Progress and the Integration of Achievements of Science and Advanced Experience Into the APK"]

[Text] The maximum possible acceleration of scientific and technical progress and the attainment of the supreme goals of science and advanced experience are powerful factors in the transfer of the national economy to the intensive path of development. The 12th Five-Year Plan plays a decisive role in this. Basic Directions in the Economic and Social Development of the USSR for 1986-1990 and for the Period Until the Year 2000 have defined qualitatively new tasks.

During the 1986-1990 period labor productivity throughout the national economy should increase by 20 to 23 percent, the national income, by 19 to 22 percent, and the per-capita real income, by 13 to 15 percent. Plans are made to expand the application of advanced basic technologies 1.5- to 2-times, striving for a qualitatively new state of individual types of industries, as well as of entire sectors. On the average, the level of production automation throughout the national economy will double.

The absolute increase in the production of agricultural products should be from 11 billion during the last 5-year period to 28 or 32 billion during the 12th Five-Year Plan and the rates of production growth will double or triple and for some products will be even higher.

By 1990 the gross output of grain is to be increased to 250 or 255 million tons, of sugar beets, to 92 or 95 million tons, of sunflower seeds, to 7 or 7.1 million tons, of potatoes, to 90 or 92 million tons, of vegetables and melon crops, to 40 or 42 million tons, of fruits and berries, to 14.5 or 15.5 million tons, and of cotton fiber, to 2.8 or 3 million tons and its quality is to be improved. Plans have been made to produce 21 million tons of meat (in carcass weight), 106 to 110 million tons of milk, and 80 to 82 billion eggs. The task of ensuring production growth of 18 to 20 percent has been set in the food, meat, and dairy sectors of industry. Labor productivity in agriculture is to be raised by 21 or 23 percent, in the food industry, by 14 to 16 percent, and in the meat and dairy industry, by 25 to 28 percent.



This can be implemented only on the path of the transition "to an economy of supreme organization and efficiency with comprehensively developed productive forces and production relations and a smoothly functioning economic mechanism" ("Materialy XXVII syezda KPSS" [Materials of the 27th Party Congress], p. 141).

The adopted decree of the CPSU Central Committee and the USSR Council of Ministers "On the Further Improvement in the Economic Mechanism of Management in the Country's Agro-Industrial Complex" is to restructure the economic mechanism in the interest of acceleration of scientific and technical progress in the agro-industrial complex. This process is many-sided and has several aspects: First of all, it is a technical and technological problem, because it presupposes a transition to intensive technologies. Then it is a biological problem, because the activation of biological factors and creation of new generations of plants and animals, more productive and efficient, are required. Next it is a structural problem, because optimization of the structure of the APK at all levels, development of its priority links, and elimination of bottlenecks and disproportions are needed. Furthermore, it is an economic problem, because resource saving types of production and a transition to cost accounting and self-support are needed. It is a social problem, because it depends primarily on the activation of the human factor. It is a moral-ethical problem, because a profound psychological reorientation and a breakdown of the formed stereotypes and of the way of thinking are necessary. This applies to managerial personnel, as well as to scientific workers. Acceleration and intensification are not only economic, but primarily and most of all moral, categories, because they will require from man a new attitude toward labor, honesty, conscientiousness, and a keen sense of duty, decency, and patriotism. It is an organizational and managerial problem, because its solution requires fundamentally new methods and style of management. It is simply insoluble by old techniques.

The intensification of science and the speeding up of its development are to become key factors in the acceleration of scientific and technical progress. This is the basis for successful scientific support for agro-industrial production. In accordance with the decree of the CPSU Central Committee and the USSR Council of Ministers "On the Further Improvement in the Management of the Agro-Industrial Complex" such a task has been entrusted to VASKhNIL [All-Union Academy of Agricultural Sciences imeni V. I. Lenin]. The academy should turn into a coordinating and cementing nucleus of all the scientific institutions of the APK, primarily the USSR Gosagroprom, in which 766 scientific institutions are concentrated, including 320 scientific research institutes and 78 oblast experimental stations. A total of 96 scientific production associations, 52 selection centers for plant growing and 23, for animal husbandry, and 22 technological centers for grain crops have been established at the base of scientific institutions.

In addition to these scientific institutions financed by the budget an entire network of scientific cost accounting organizations--59 planning institutes and 178 design offices--operates. The total number of scientific workers is 114,000, including 92,000 scientific associates, among them 2,700 doctors of sciences and 39,000 candidates of sciences.

Scientific institutions of the USSR Gosagroprom system have a large experimental base at their disposal. There are more than 1,200 experimental scientific production, seed growing, and pedigree stock farms and 57 experimental-industrial enterprises under their subordination. The scientific potential of the country's APK is great. However, it is not distributed uniformly. In some large regions there is an acute shortage of personnel and equipment, which hampers efficient scientific support. At the same time, the yield of the scientific potential does not yet fully meet present requirements and tasks.

A correct selection of priority directions and problems, on which the forces and means of science should be concentrated, is of the greatest importance. The basic task of science lies in the development of scientifically substantiated proposals on improving production relations and developing productive forces, which makes it possible to utilize the advantages of the socialist economic system to the greatest extent.

Paramount importance should be given to the development and mastering of scientifically substantiated systems of management of the economy, agriculture, animal husbandry, and feed production and of machine systems, application of intensive resource saving technologies in the production and processing of agricultural products and of advanced forms of labor organization and wages, improvement in the economic mechanism of management, social development of rural areas, efficient nature utilization, and environmental protection.

Overall scientific support for the development of agro-industrial production should be based on all-Union and sectorial scientific and technical programs developed and fulfilled by scientific research institutes with the enlistment of other scientific institutions under the general guidance of VASKhNIL. Programs should be interconnected and made jointly subordinate.

In every autonomous republic, kray, and oblast on the basis of the institutions that already exist it is advisable to establish centers for scientific support for agro-industrial production. At the same time, one of the institutions performs the functions of the head institution. A specific study of this problem requires taking regional differences strictly into account, but in any event it is necessary to provide scientific support for problems of development of the economy, plant growing, farming, and animal husbandry and to set up information computer services. All scientific research work in an oblast (kray and autonomous republic) is organized according to a single overall program for the acceleration of scientific and technical progress. Responsibility for the fulfillment of research programs, as well as for initial seed breeding, deliveries of pedigree stock, and the development and check of intensive technologies, should be placed on scientific support centers. They should be closely connected with a set of measures to accelerate scientific and technical progress developed in RAPO. For this, in addition to scientific institutions, experimental and base farms should be included in centers. Scientific production associations will be established in every oblast (kray and autonomous republic).

As applied to local conditions such centers will work out proposals on an overall development of productive forces, equalization of the economic conditions of management of agricultural enterprises and organizations of the agro-industrial complex, improvement in the social living conditions of the rural population, and efficient utilization of natural, material-technical, and labor resources. Economic management systems should encompass all the levels of regions from large zones and economic regions to oblasts, krais, and rayons, and, to be sure, farms.

It is necessary to pay special attention to measures aimed at the following: increase in land fertility on the basis of overall chemification and land reclamation, protection of soil against erosion, and environmental protection; stable growth of the production of grain and other plant products through an extensive application of intensive technologies; increase in the production of livestock products through the upgrading of the breed composition and reproduction of the herd, improvement in veterinary services, and creation of a firm feed base; optimal specialization, concentration, and integration of production and improvement in economic relations among enterprises for the production, storage, processing, and sale of products; ensuring a high efficiency of the engineering service and of the repair, technical servicing, control, operational management, and efficient utilization of agricultural equipment; establishment of stable labor collectives at enterprises, kolkhozes, and other enterprises and organizations and the maximum possible development of their initiative and responsibility; general dissemination of the collective contract (including family and individual contracts under certain conditions) and cost accounting, improvement in the forms of the socialist competition, and a full utilization of moral and material incentives aimed at attaining the highest end results of labor.

The present situation dictates the need to improve the forms and methods of management of scientific and technical progress. Planning, economic incentives, and effective organizational forms of integration of science and production are the most important of them. The development of state, republic, and oblast scientific and technical programs receives priority in scientific research planning. The assignment orders of the USSR Gosagroprom, gosagroproms of the Union and autonomous republics, and agro-industrial committees of krais and oblasts form the basis for these programs. These assignments should be aimed at the solution of major problems.

The financing of scientific activity is an important problem, which is far from solved. The specific financing of scientific research, design, and technological work performed both according to the state budget and assignment orders is the most promising. More attention should be paid to the development of scientific research on the basis of contracts between scientific institutions and large associations and enterprises. In this connection the experience of foreign countries deserves attention. Both fundamental and applied research is financed basically by the state budget. Contractual relations exist primarily during the execution of integration developments.

Economic incentives represent an important link in the management of scientific and technical progress. In the scientific sphere they are still

utilized weakly. To some extent economic incentives are applied during the development and integration of new varieties and animal breeds and the production of equipment. On the whole, however, the wages of scientific workers, as well as the financing of scientific institutions, hardly depend on the results of their activity. In connection with this it is advisable to revise the system of wages of scientific workers, designers, and technologists of scientific research institutions and of design and technological organizations of the APK.

Big opportunities for the acceleration of scientific and technical progress are created in scientific production associations, which are granted the right to establish economic incentive funds. At present it is planned to significantly expand the network of scientific production associations at the base of sectorial and zonal scientific research institutes, design and technological organizations, and oblast and sectorial agricultural experimental stations, as well as of production-scientific systems at the base of advanced kolkhozes and sovkhoses. In the country there is positive experience in the integration of science with production. For example, technology for the cultivation of corn for grain has been developed at the Dnepr Scientific Production Association and introduced in the country on an area of 3.4 million hectares. The effect of the Dnepr Scientific Production Association on an increase in corn grain production is especially big on farms in Dnepropetrovsk Oblast. In 1983-1985 intensive corn cultivation technology was mastered on 102 kolkhozes and sovkhoses on an area of 76,000 hectares, which made it possible to increase the yield by 11.7 quintals per hectare.

Moldavia's scientific production associations work productively. They have proposed, tested, and mastered intensive technologies for the cultivation of corn, sunflower seeds, winter wheat, soybeans, sugar beets, and fodder crops, as well as for the production of livestock products. The practical experience of the Scientific Production Association for Horticulture and Viticulture imeni R. R. Shreder (city of Tashkent) deserves attention. Central Asia is part of the zone of its activity and influence.

The USSR Gosagroprom and VASKhNIL take measures to further develop the network of scientific production associations and to increase their efficiency. It is necessary to set up an effective economic mechanism of scientific production associations and to encompass all the links of agro-industrial production in this form.

Refining the functions of all-Union, republic, and zonal scientific research institutions, technological and planning-design organizations, and higher educational institutions, determining their specialization and basic directions in work, and intensifying research on new priority directions are important tasks in the perfection of the system of scientific support for the development of the agro-industrial complex. At the same time, it is necessary to proceed from the fact that every institute is responsible for the state and mastering of scientific and technical progress in the corresponding sector or region. It is also necessary to refine the network of base kolkhozes, sovkhoses, experimental training farms, enterprises, and organizations and to develop and approve measures to strengthen their material and technical base and to provide them with personnel.



Science in higher educational institutions is a major potential in the cause of scientific support for APK development. It is necessary to expand the connection of scientific collectives of higher educational institutions with scientific research centers, to include them in general work plans and programs, and to establish training-scientific-production and training-scientific associations at the base of higher educational institutions or their subdivisions. Higher agricultural educational institutions can and should become inseparable elements of regional scientific support centers. The continuous training and improvement in the skills of personnel and development in scientific institutions of an appropriate material and technical base and instrument support in scientific institutions are decisive conditions for the acceleration of scientific and technical progress.

Management of scientific and technical progress under present conditions is connected with the processing of substantial information volumes. Management today is management of vast information flows. The presently existing information system was formed during the 1950's and no longer meets practical needs. It is necessary to transfer it to the basis of computerization and to establish appropriate data banks.

The organization of the integration of the achievements of science and advanced experience in agro-industrial production is multiplane work requiring coordinated actions of scientific institutions, management bodies, farms, and enterprises directed toward the maximum end result of the APK--increase in output, improvement in its quality, and reduction in production costs.

The USSR Gosagroprom, gosagroproms of the Union and autonomous republics, agro-industrial committees of krays and oblasts, and RAPO plan and organize the integration of scientific developments, including financing for specific purposes, provision of material and technical resources, propaganda of scientific and technological achievements, and training of managers and specialists of farms, enterprises, and organizations. However, basic practical work on mastering scientific and technical achievements is done on farms. Managers and specialists of kolkhozes, sovkhoses, and other APK enterprises are responsible for its organization and results.

The following proposition of the political report of the CPSU Central Committee to the 27th party congress is of fundamental importance for improving integration activity at all levels: "... The orientation of science toward national economic needs must be made more energetically. However, the orientation of production toward science and its maximum receptivity to scientific and technical achievements are just as important."

At present the achievements of science and advanced experience are introduced according to the following tentative scheme:

The completed scientific study accepted and recommended for integration by the academic council of a scientific institution is presented to a scientific and technical council; depending on its significance, to the scientific and technical council of the gosagroprom of the USSR, of a republic, or of an oblast.

Scientific and technical councils, adopting a decision on integration, make it possible to widely apply the development in production. On the basis of this decision information services and propaganda bodies widely inform production workers of the effectiveness of this development and farm specialists and managers with an active participation of management bodies and scientists organize its integration. The innovation can also bypass the scientific and technical council and be immediately received in production directly from developers. This practice can give a positive--often considerable--effect.

For a radical improvement in organizing the integration of scientific achievements and advanced experience in agro-industrial production, it is necessary to improve the planning of this sphere of activity, to raise the responsibility of officials, and to increase the interest of all participants. Just as high a status as that given to assignments for the production and sale of products should be given to plans for the integration of scientific and technical developments. On the basis of these plans a consolidated integration plan is drawn up at enterprises and in rayons and oblast and republic plans, in an oblast and a republic.

An integration planning system is also being established at the level of the country, where there are plans for scientific and technical progress in production sectors (grain farming, vegetable growing, cattle breeding, and so forth): the consolidated plan of the USSR Gosagroprom, which includes the most important entries of the integration plans of sectors and key intersectorial measures; the section "development of science and technology" of the state plan for the economic and social development of the APK, which includes entries of the consolidated integration plan of the USSR Gosagroprom, as well as basic interdepartmental measures implemented within the framework of the agro-industrial complex and the national economy as a whole; integration plans of enterprises, consolidated plans of rayons, oblasts, and republics, and sectorial programs for the acceleration of scientific and technical progress.

All this should establish a single interconnected system of planning the integration activity in the country. Control over the fulfillment of plans is entrusted to appropriate bodies of the USSR Gosagroprom. For this special subdivisions have been formed at all levels.

The efficiency of integration of the achievements of science and advanced experience is ensured where scientifically substantiated systems of management of the economy as a whole, not individual uncoordinated measures, are mastered (see the materials of the special session of VASKhNIL in the journal VESTNIK SELSKOKHOZYAYSTVENNOY NAUKI, No 2, 1986). Farming systems are the key elements of the economic management system. During the past five-year plan they were prepared in all the country's regions, which was an important step on the path of improvement in the interaction of science with production. These systems should be constantly improved on the basis of new scientific data and the accumulated experience. On this basis it is necessary to stop erosion, to eradicate weeds, to ensure a positive humus balance, and to neutralize soil acidity and salinity. Farming systems should be developed for every farm with due regard for specific natural and economic conditions. In

the next 2 or 3 years it is planned to complete the realization of basic system elements. This will make it possible to attain an optimum structure of sown areas, to raise soil fertility and the general standard of farming, to improve the efficiency of chemicalization, and, as a result, to increase the productivity, stability, and efficiency of plant growing. We must not forget the following simple fact: If the production standard and technological discipline are low and if there is no system, neither fertilizers, nor irrigation, nor invested funds will give an effect.

Practical problems concerning the transfer of all sectors to intensive technologies occupy the central place in farming systems. Intensive technologies of cultivation of grain crops, as well as of all other agricultural crops, are mastered at accelerated rates in production. In 1985 more than 16 million hectares of grain crops were occupied with such technologies and 16 million tons of grain were obtained additionally. Production costs of grain were lowered, its quality improved, and purchases of strong, durum, and valuable wheat increased. In 1986 intensive technologies are to be mastered during the cultivation of 21 crops on an area of 38 million hectares. The successes and failures of the first stage of the mass mastering of these technologies should be taken into consideration. At the same time, it is necessary to realize existing potentials--to use chemicals economically, to reequip machinery (especially feeders), and to utilize the brigade and other forms of the collective contract efficiently.

Animal husbandry systems are important components of economic management systems. Scientific institutions together with agricultural bodies established them in all oblasts during the past 5-year period. Many of them have been published and on their basis the development of animal husbandry systems directly on farms is being completed. In the RSFSR, where much attention is paid to this work, such systems exist on 5,200 kolkhozes and sovkhozes and 17,000 animal husbandry specialists have been trained. However, this work is not carried out in a sufficiently specific manner everywhere.

At present there is a solid basis for an accelerated integration of the achievements of science and advanced experience and a network of specialized farms called upon to demonstrate the possibilities of scientific and technical progress has been established. These are experimental model farms of scientific institutions, training experimental farms of agricultural higher educational institutions, and pedigree stock plants. Unfortunately, it is not yet possible to avoid shortcomings and oversights in their work. By no means everyone has mastered scientific farming and animal husbandry systems, intensive technologies, and advanced methods and effective cost accounting and the collective contract have not been introduced everywhere. They do not always work on the basis of self-support, successfully increase land productivity, and solve social problems. The decree on the economic mechanism should be realized first of all on these farms.

The experience of the best farms deserves special attention and the maximum possible dissemination. An active striving on the part of workers of all levels for science and for innovations in equipment, technology, and organization of production and labor is the characteristic feature of all advanced workers. An analysis of the activity of many advanced farms in the



country, regardless of their specialization and geographic location, points to the presence of the following characteristics in them: a close connection with science, existence of an economic management system developed in conformity with local conditions, cost accounting assigned to the work place, collective and individual contracts, and consideration of the human factor.

The Order of Lenin Zarya kommunizma State Pedigree Stock Plant in Domodedovskiy Rayon, Moscow Oblast, is a convincing example of what efficiently organized work by specialists and all farm workers and their interaction with science can give. The enterprise maintains a close connection with many scientific institutions. The specialists of the state pedigree stock plant jointly with scientists at the Agricultural Academy imeni K. A. Timiryazev have worked out a scientifically substantiated economic management system. The flow-shop animal keeping technology and the collective contract mastered with the participation of scientific institutions in 1979 have played an important role in the advance of animal husbandry productivity at the state pedigree stock plant.

Under the guidance of VASKhNIL academician N. G. Andreyev, head of the Department of Meadow Cultivation of the Agricultural Academy imeni K. A. Timiryazev, long-term cultivated irrigated pastures on an area of 900 hectares have been established at the state pedigree stock plant. They provide the pedigree stock with green feed during the summer period with a moderate expenditure of concentrates. Work on herd "holsteinization" is carried out with the help of scientists at the Institute of Breeding and Genetics of Farm Animals. A laboratory and the support center for embryo transplantation have been established at the state pedigree stock plant with the participation of scientists at the All-Union Order of the Red Banner of Labor Scientific Research Institute of Animal Husbandry. Forty calves have been obtained by this method. They are developing well and will soon replenish the general herd of highly productive cows.

The farm is an initiator of the movement for the integration of intensive technologies in all agricultural sectors. An average milk yield of 5,513 kg per fodder cow from a herd of 3,100 head has been obtained here. By 1990 it is planned to increase it to 6,000 kg and the yield of grain crops, to 45 quintals and of hay, to 80 quintals per hectare.

The Nazarovskiy Sovkhoz in Krasnoyarsk Kray headed by Hero of Socialist Labor A. F. Veprev systematically and creatively implements measures to improve the farming and animal husbandry system and to master intensive technologies and efficient forms of labor organization and wages and has introduced cost accounting. With a lower provision with capital than on other farms it obtains twice as much gross output per hectare than in Nazarovskiy Rayon and three times as much as, on the average, in Krasnoyarsk Kray. In 1985 the yield of grain crops from 20,000 hectares totaled 31.8 quintals per hectare, while the average amount of precipitation was only 308 mm. All sectors are stably profitable, including dairy husbandry.

The Adazhi Kolkhoz in Rihzskiy Rayon, the Latvian SSR, where more than 100 specialists with diplomas, including five candidates of sciences, work, is a convincing testimony to the high efficiency of mastering of scientific

achievements. Industrial milk production technology has been developed and introduced on the farm. One operator obtains an annual milk yield of 450 tons. A feed shop for the preparation of a full-ration feed mixture according to five formulas for cows of every physiological group operates. A collective contract with two-shift labor organization has been introduced. A laboratory for the control of animal metabolism and of the quality of feed has been established on the farm. A club of cows weighing 6,000 kg has been established. An automated system for the collection of zooveterinary information and its computer processing are applied. On this kolkhoz 40 quintals of grain per hectare and more and 270 quintals of potatoes per hectare are gathered on poor podzolic soil, 1,600 quintals of milk and 530 quintals of meat per 100 hectares of agricultural land are produced, and monetary proceeds will exceed 40 million rubles. Small subsidiary industries and the processing of products are developed on this farm. A total of 23 tons of organic fertilizers per hectare are applied annually.

The efficient work of specialists, their aiming at innovations, and their close interaction with scientists make it possible to ensure high labor results. At present in the USSR Gosagroprom system there are more than 2 million specialists, or more than 30 people per farm, on the average. Therefore, daily work with specialists, rise in their role in the acceleration of scientific and technical progress, and enhancement of their prestige should be the objects of concern on the part of USSR Gosagroprom bodies.

Efficient labor by workers is possible only when it is organized properly, that is, when functions, rights, responsibility, and incentives are defined clearly and, of course, when specialists are well provided with housing, other social benefits, transport, laboratory equipment, and office mechanization.

The country's higher educational institutions send skilled scientific successors to rural areas. If sometimes a graduate of a higher educational institution does not justify hopes, it is necessary to carefully examine every case from the standpoint of the special attention paid by the party to young specialists. Candidates and doctors of sciences work on many kolkhozes and sovkhoses. In fact, a kolkhoz and sovkhos sector of agrarian science is being formed.

Propaganda and scientific and technical information are important elements in the "science-production" system. For these purposes the USSR Gosagroprom utilizes the entire diversity of forms and resources: central, oblast, and rayon newspapers, journals, radio and television broadcasts, technical and propaganda motion pictures, exhibitions, scientific and technical conferences, seminars, advanced experience schools, and experimental model and base farms.

In propaganda work it is necessary to more fully utilize the capabilities of the All-Union Agropromizdat Association. About 100 (Union and republic) journals of this association shed light on scientific and technical achievements and advanced experience in various directions in APK activity. The annual volume of publication of literature on APK problems by the association comprises about 500 books and more than 450 posters with a total volume of more than 8,000 publishers' sheets.

The plan for the publication of literature during the 12th Five-Year Plan is connected with the basic tasks of the development of the agro-industrial complex and acceleration of scientific and technical progress. Special attention is paid to priority directions--production intensification, organization and stimulation of labor, biotechnology, automation and robot engineering, computerization, and improvement in the economic mechanism of management.

All the Union republics, 53 krays and oblasts in the RSFSR, and six oblasts in the Ukrainian SSR have permanent exhibitions. Scientific and technical achievements and the experience of advanced workers of the USSR Gosagroprom are widely displayed in 40 pavilions of the Exhibition of Achievements of the USSR National Economy. Other means of propaganda (literature, motion pictures, seminars, lectures, and meetings with scientists and production innovators) are also utilized at all-Union, republic, kray, and oblast exhibitions with the use of visual aids characteristic of them. More than 60,000 workers at the agro-industrial complex are annually taught intensive production technologies and economic methods of management.

Sectorial bodies unified into the state system of scientific and technical information perform an ever greater role in the propaganda of the achievements of science, technology, and advanced practice. The All-Union Scientific Research Institute of Information and Technical and Economic Research of the APK (VNIITEIagroprom), which coordinates the work of other information institutes, has been appointed as the head institute in the agro-industrial complex.

Territorial centers for scientific and technical information of oblasts, krays, and autonomous republics carry out specific work on the propaganda of the achievements of science and advanced experience. They implement many measures in close cooperation with primary organizations of the Scientific and Technical Society, of the All-Union Society of Inventors and Efficiency Experts, and of the Znaniye Society and with universities. Bureaus for scientific and technical information consisting of leading production specialists and innovators are established directly on farms.

The activity of base farms existing in all republics, krays, and oblasts is one of the most advanced and promising forms of dissemination of advanced experience and personnel training. They are designed for the development of models of various technologies, organizational forms, and economic management systems, which serve as distinctive "visual aids" for farm specialists and managers undergoing training and qualification apprenticeship.

For an efficient integration of the achievements of science and advanced experience kolkhozes and sovkhoses should have at their disposal educational, propaganda, and methodological materials, which make it possible to specifically train executors with due regard for the characteristics of local conditions. Therefore, on the basis of manuals on intensive technologies, which have already been published, and other locally available materials it is necessary to prepare recommendations for kolkhozes and sovkhoses in every oblast and rayon and to present them to every worker.

The decree of the CPSU Central Committee and the USSR Council of Ministers "On the Further Improvement in the Economic Mechanism of Management in the Country's Agro-Industrial Complex" enables farms to more fully utilize material incentives in the realization of the acceleration of scientific and technical progress.

The mastering of innovations requires a high level of competence in problems of theory, a correct evaluation of the actual state of affairs, a high level of organization, discipline, responsibility, initiative, and inventiveness.

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CSO: 1824/15

## LIVESTOCK AND FEED PROCUREMENT

### FEED PROCUREMENT FINAL STAGE REVIEWED

Moscow SELSKAYA ZHIZN in Russian 19 Sep 86 p 2

[Article by M. Glinka, zootechnician: "To Avoid Trouble at the Final Stage"]

[Text] The summer field season is nearing its end and feed procurement is also close to completion. How do matters stand with the replenishment of fodder stocks? This is the answer given by the USSR Central Statistical Administration to this: A total of 108.9 million tons of coarse and succulent feed in terms of feed units have been procured--this is 105 percent of last year's level and 79 percent of what has been planned. A total of 12.61 quintals of feed units per standard head have been stored. Furthermore, 30.6 million tons of grain concentrates from the current year's harvest have been stocked for public animal husbandry--41 percent more than a year ago.

Even though these indicators exceed last year's level, it is early to rest content. After all, not a single Union republic has fulfilled the fodder accumulation plan yet. Lithuania (97 percent) and Armenia (92 percent of what has been planned) are the closest to this. The biggest fodder reserves--15.13 and 14.32 quintals of feed units per standard head of livestock--have been created in these republics respectively. Farms in the Ukraine and Estonia have stored the least feed. The situation in Moldavia is improving. Whereas last week the republic's farms lagged in feed procurement behind last year's level, now they have already outstripped the 1985 schedule. In all there are 11.67 quintals of feed units per standard head here. During the week under review specific fodder reserves have increased by 2.67 quintals of feed units. On Kazakhstan's farms this increase comprised 2.05 quintals.

Azerbaijan's fodder stocks have increased most slowly during the week under review (0.32 feed units). Measures to rectify the situation are being taken in the republic. The procurement of perennial grass, stubble corn, and cruciferous crops is intensified here. The task of obtaining no less than one and a half grass cuttings on irrigated fields has been set. Water resources released in viticulture and cotton growing are allocated for fodder fields



everywhere. The application of preservatives and nitrogen containing additives in silage making is expanding.

Kolkhozes and sovkhoses in Belorussia, Lithuania, Latvia, Tajikistan, and Armenia have unjustifiably lowered feed procurement rates. Meanwhile, by no means all fodder resources have been exhausted. Suffice it to say that plans for ready silage production in these republics have been fulfilled only 60 to 63 percent and the procurement of fodder root crops is just expanding.

In the Russian Federation farmers in the following oblasts have created the biggest fodder reserves (per standard head of livestock) in their regions: Arkhangelsk Oblast (15.3 quintals of feed units), Leningrad Oblast (15.2), Kaluga Oblast (15.1), Kirov Oblast (13.9), Lipetsk Oblast (17.1), Saratov Oblast (17.9), Krasnodar Kray (15.7), the Udmurt ASSR (15.4), Altay Kray (16.3), Chita Oblast (13.6), and Amur Oblast (15.5).

However, farmers have not been able to cope with the complex fall situation everywhere. Ryazan Oblast, where less than one-half of the necessary quantity of fodder--only 9.7 quintals of feed units per standard head of livestock--has been stored, lags as before. Ryazan farmers have fulfilled the plan for the procurement of hay only 75 percent and of haylage, 51 percent. There is hope that silage making will improve the situation somewhat. While the assignment calls for the production of 2,400,000 tons of ready silage, farmers have placed more than 2,500,000 tons of the green mass in storage facilities. Nevertheless, other sources of replenishment of fodder stocks should be utilized here.

A meeting of advanced livestock breeders was held on the initiative of oblast agroprom committees and of the trade union of workers of the agro-industrial complex in Tula a few days ago. One of the most important problems--the decline in the productivity of dairy farms--was discussed at it. The fulfillment of state plans was under the threat of disruption. The discussion at the meeting concerned primarily the human factor and the creation of good conditions for farm workers--this was the key to success. There is no doubt that it is extremely important to create all the conditions for shock work for people. Nevertheless, it is strange that the main reason for the decline--the weak feed base--somehow has remained on the sidelines. At the meeting it was noted with confidence that the oblast was fully capable of fulfilling the annual assignment for the production of all types of plant products. Apparently, feed is not included in such products here. After all, its accumulation plan is fulfilled only 70 percent and only 11.1 quintals of feed units per standard head have been stored. The oblast has not fulfilled assignments for any one type of succulent and coarse feed. Under such conditions even the most experienced and conscientious milkmaids and livestock breeders working on the best farms will not be able to rectify the situation.

Nature has left quite a short time for the correction of errors--synoptic meteorologists are forecasting an early cold spell. This is not taken into consideration in Ivanovo Oblast, where more than one-fourth of the corn crops have remained standing by the middle of September. A significant part of the main silage crop has not been harvested in the environs of Smolensk and Kuybyshev. A harvest can be lost in such a way. The slowness of farms in

the Tuva Autonomous Republic, where corn has not been harvested on 20 percent of the areas, is all the more incomprehensible.

In general, the state of affairs with feed procurement on many farms in Siberia evokes serious apprehensions. For example, only 9.1 quintals of feed units per standard head of livestock have been procured in Novosibirsk Oblast and even less than that, in Chanovskiy, Tatarskiy, Baganskiy, Severnyy, and Kyshtovskiy rayons. Fodder reserves in Tyumen Oblast and Krasnoyarsk Kray are not big. It is especially important to see to it not only that they are replenished, but also that what has been accumulated is utilized most efficiently. The path to this is known--a good feed preparation in special shops. Unfortunately, attention to this aspect of the matter is not paid everywhere. In the same Krasnoyarsk Kray in a number of rayons there is not a single feed shop for the preparation of full-ration mixtures and in others only a small number of farms is equipped with them. Last winter in the Yakutsk ASSR mechanized feed preparation technology was used on farms, where less than one-tenth of the cattle was kept. The situation is changing slowly. Farms in the autonomous republic now have only 6.3 quintals of feed units per head of livestock.

Feed procurement has reached, one can say, the finish line. The stabling period is beginning on farms. In order that it may be highly productive, during the days remaining before winter it is necessary to take every measure to replenish feed reserves and to avoid trouble at the final stage.

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CSO: 1824/13

LIVESTOCK AND FEED PROCUREMENT

UDC 636.22/.28.083 "324"

FEED, FACILITIES FOR WINTER VIEWED

Moscow ZHIVOTNOVODSTVO in Russian No 8, Aug 86 pp 2-3

[Unattributed article: "To Prepare for Winter Promptly"]

[Text] In its appeal to workers in the Soviet Union the Central Committee of the party called upon them to widely expand the competition for a successful fulfillment of the assignments of the 12th Five-Year Plan and to transform bold plans and ideas into the energy of practical actions.

Profound changes are taking place in the agro-industrial complex, as in the entire national economy. Production is increasingly assuming a stable nature and is being transferred to industrial technologies. In the course of the competition collectives of kolkhozes, sovkhozes, and other state enterprises are improving labor organization, increasing its efficiency, and better utilizing the accumulated potential. On most farms during the current year the production of livestock products has increased and growth has been attained through intensive factors, that is, a rise in milk yields and in weight gains, an increase in wool yields and in the egg laying of poultry, and an improvement in stock reproduction. Rural workers in the Ukraine, Kazakhstan, Belorussia, Moldavia, and the Russian Federation have attained the biggest increase in milk yields. It is important to preserve and augment the rates of increase in the production and purchases of milk, meat, eggs, and wool.

Livestock wintering--the period of a strict evaluation of the skills of personnel--is approaching. The organizing role of managers of sections, brigades, farms, rayon agro-industrial associations, and superior bodies for the management of the agro-industrial complex is being tested during this crucial season.

The success of wintering is determined primarily by a reliable provision of animal husbandry with high-quality feed. That is why it is necessary to take additional measures to intensify the rates of procurement of hay, haylage, and silage. A great deal can still be done for the replenishment of fodder reserves by fully mowing grass from natural land, repeatedly cutting perennial grass, harvesting all straw and chaff, corn silaging, gathering sunflower heads and vegetable growing waste, and placing root crops and

byproducts of the processing industry in storage (pulp residues, grape pomace, and so forth). Special attention should be paid to the procurement of mixed silage, which makes it possible to reduce grain consumption for hog feeding by 20 to 30 percent. On every farm it is necessary to utilize all the potentials and possibilities for replenishing feed reserves and providing livestock wintering with plenty of feed.

Measures for an increase in the efficiency of feed utilization should be thought out everywhere right now. In this connection the organization of the storage and efficient preparation of feed for feeding and of the feeding of rations balanced in protein, vitamins, and mineral substances deserves the closest attention. All hay, haylage, and silage, following the experience of the Sovetskiy Pogranichnik Kolkhoz in Vulkaneshtskiy Rayon, the Moldavian SSR, should be placed in major installations at the feed yard and their reliable storage and efficient utilization should be ensured. Two feed shops operate here: one for the preparation of liquid batter mixes and the other for high-grade feed mixtures from grass chop, haylage, silage, root crops, concentrated feed, and mineral additives. Owing to the storage of feed in major installations and the preparation of balanced feed mixtures, on the farm in 1985 the average milk yield per cow was 4,035 kg (as compared to 2,551 kg in 1981 before the feeding of feed mixtures). Feed expenditures per quintal of milk were reduced to 123 feed units, as compared to 193 feed units, and labor expenditures on the production of 1 quintal of milk, to 5.9 hours as compared to 7.5 hours. Expenditures on the establishment of a feed yard (construction of major storage facilities and feed shops and improvement of the territory) were recovered in 2 years. Of course, it is complicated to build major installations on every farm in 1 year, but order in feed utilization must be introduced at every section.

On the country's farms there are more than 50,000 feed shops and kitchens and it is necessary to see to it that all of them are put into operation during the fall season, when there are sufficient raw materials for the preparation of full-ration feed mixtures. It often happens that during this time animals are kept on meager pastures, or are fed with overripe annual crops and straw, and their productivity drops sharply.

It is extremely important to ensure an efficient utilization of concentrated feed. On every farm it is possible to prepare enriched grain fodder mixtures by introducing ground or flattened grain, including leguminous crops, grass meal, defluorinated phosphates, and other mineral additives and premixes. The production of feed mixtures has been well organized on the Ploskovskiy Sovkhoz in Kiev Oblast, where 17 kg of milk per cow and more are obtained in 24 hours during the fall period.

Under Siberia's conditions the preparation of haylage from grain fodder crops is widespread. The Nazarovskiy Sovkhoz in Krasnoyarsk Kray has accumulated valuable experience in this respect. In the rations of cows and young cattle grain haylage occupies 25 to 26 percent here. On the farm year after year the productivity of animals grows, the costs of milk production and of weight gain in cattle remain low, and the profitability of animal husbandry is quite high.



The problem of an efficient utilization of fodder grain is especially urgent in hog breeding. Almost one-third of the grain feed used in the country is expended on hog feeding. The experience of advanced farms in the Baltic region and Belorussia indicates that in hog rations the expenditure of concentrates can be lowered to 65 or 70 percent of the total food value of a ration. However, for this it is necessary to have high-quality mixed silage prepared from leguminous grass, root crops, and corn ears. For example, the Kolkhoz imeni Lenin in Veliko-Bagachanskiy Rayon, Poltava Oblast, prepares mixed silage of the following composition: corn ears of waxy or milky-waxy ripeness, 50 percent; sugar beets with tops, 30 percent; lucerne grass, 20 percent. One kg of such feed contains 0.3 feed units, 35 grams of digestible protein, 4.9 percent of cellulose, and 22 mg of carotene. On the pedigree hog raising Industriya Sovkhoz in Minsk Oblast 3 or 4 kg of mixed silage prepared from potatoes, grass meal, and grain waste are introduced into rations of fattening sows and animals.

The waste of processing industry and public dining enterprises and food waste collected from the population represent a big potential for the replenishment of feed resources. In many cities and workers' settlements in the RSFSR, the Ukraine, Belorussia, Uzbekistan, and Estonia municipal service bodies have organized the collection of unplanned feed well. For example, Leningrad Oblast annually utilizes 750,000 to 760,000 tons of food waste for feed purposes, replacing 170,000 tons of fodder grain with it. However, in many cities proper attention is not paid to this important matter.

Keeping animals in spacious warm livestock barns is the second important condition for successful wintering. Repairs of floors and feeders made promptly, heating of ceilings and walls, and disinfection of barns are indispensable conditions for successful wintering. Many kolkhozes and sovkhozes in the Baltic region, Belorussia, the Ukraine, and the Russian Federation with the transfer of livestock to summer keeping have embarked on repair work. This is annually done on farms in Vologodskiy Rayon in Vologda Oblast, where with the transfer of livestock to summer camps the preparation of barns for winter begins. It is not accidental that the rayon's livestock breeders have attained the highest productivity of dairy livestock among the oblast's other rayons.

However, the repair of barns is by no means made promptly everywhere. It is necessary, without losing a single day, to organize the preparation of sections for winter everywhere. Special attention should be paid to the reconstruction of sections, equipment of delivery departments at every dairy section, and creation of conditions for the transition to the flow-shop system of milk production and herd reproduction. On farms, where conditions for keeping calves at section dispensaries have not been created, it is advisable to organize a cold method of keeping calves in special dispensary houses. This method should ensure an improved feeding of calves.

A smooth operation of sections in winter is inconceivable without an efficient operation of mechanization facilities. It is necessary in advance to take an inventory of the equipment of feed shops and milking installations and of facilities for the mechanization of the removal of manure and watering of animals. Before the stabling of livestock equipment should be put in order

with the forces of special brigades of adjuster fitters and responsible individuals should be assigned to its operation.

In the country more and more sections are changing over to a two-shift work regime and contract collectives are being established. However, proper attention is not paid to this important problem everywhere. There are few contract collectives at sections in Kazakhstan, Kirghizia, Georgia, Turkmenia, and a number of oblasts in the Russian Federation. In order to increase the efficiency of section work, before the end of the year it is necessary to carry out extensive organizational work with a view to introducing cost accounting and the collective contract at livestock breeding sections everywhere as early as 1987.

Economic and zootechnical services of rayon agro-industrial associations, kolkhozes, and sovkhoses have a big role in this important matter. They should form contract collectives, work out production assignments, assign limits of expenditures, determine rates for products, prepare draft contracts, and, most important of all, ensure the observance of contractual relations between contract collectives and the farm administration during the year. Contract collectives require a sensitive and thoughtful attitude toward them and any malfunction and disorder can lead to undesirable consequences.

Examples of harmonious work on the part of contract collectives exist in every rayon and personnel should be trained on the basis of their experience. Cost accounting and the collective contract are being actively introduced into animal husbandry on farms in the Tatar ASSR, Stavropol Kray, and Sverdlovsk, Kharkov, and other oblasts.

Agricultural bodies and farm managers and specialists are called upon to introduce intensive technologies into animal husbandry in every possible way. The flow-shop system of milk production and herd reproduction has proved its value. For example, 532 sections, at which almost one-half of the cow stock is concentrated, operate in Voronezh Oblast. An intensive raising and fattening of cattle, hogs, and poultry are being introduced in the country successfully. At the same time, the intensification of animal husbandry has not yet gained in scope. Extensive forms of the sector's management predominate on most farms. During preparations for winter it is important to outline and implement measures for the transfer of animal husbandry to intensive rails and to strive for the production of high milk yields and weight gains with a reduction in labor and feed expenditures.

It is important to implement measures to create good conditions for section workers. They include concern for hot food, for the organization of trade and cultural and every-day services, for the provision of special clothing, and for improvements in the section territory. The manifestation of constant and tireless concern for working and living conditions and for the creation of a normal moral and psychological climate in the collective will be a reliable guarantee for retaining personnel in animal husbandry and for ensuring highly productive labor during the forthcoming wintering period.

During the stabling period it is necessary to raise the level of socialist competition, to develop the striving on the part of collectives and individual

workers for the maximum utilization of potentials, and to attain the highest indicators of animal productivity. It is necessary to enhance in the maximum possible way the role of the moral factor in the competition and at the proper time to take notice of and support the creative initiative, conscientious labor, and occupational skills of workers, kolkhoz members, and specialists.

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CSO: 1824/14

## FOOD PROCESSING AND DISTRIBUTION

### CRUCIAL PROBLEMS OF PUBLIC CATERING VIEWED

#### Efficiency Questioned

Moscow IZVESTIYA in Russian 5 Jul 86 p 3

[Article by Zh. Mindubayev, IZVESTIYA correspondent: "Dinner in the Dining Room on the Corner"]

[Text] Ulyanovsk--I've got a problem that I'm sick and tired of in a direct as well as a figurative sense: public catering. This is something with which we are all familiar. However, our own impressions, as we all know, are much sharper than other people's, so I'll begin with them.

I dined with G. Averkiyevoy, deputy chief of the oblast public catering administration in a so-called "open dining room". It was a little stuffy, a little dirty, you take your place in the serving line, the aluminum forks are bent. Galina Ivanovna and I, in this "Tea House", took cabbage, cabbage soup, pork with rice and gravy. We ate. "Well, how is it?" "It's bearable," she said, shrugging her shoulders. And wouldn't you know it: at just that moment two quality control inspectors started making notes in the kitchen: "The cabbage and the milk are sour, the garnish and dressing aren't fresh...."

We had occasion that day to visit several more of these establishments, and no where did we get through it without hearing complaints from the diners and the examiners. "The stuffed cabbage was burnt." "The pancakes were a little undercooked." "You spend almost two rubles and leave still hungry...." "There weren't any napkins." "The plates were greasy."

No, the public catering client is somewhat less than delighted. But is this really anything new? And really only in Ulyanovsk? Why is this business of feeding people, seemingly not the most complicated affair, not getting along so well? In fact everything the business needs is there: the dining rooms, the cooks, gas, the stoves, the quality inspections and an army of administrators. Can it be that the diner has become hard to please, that he wants too much? No to that question, too. The demands of a customer who occupies his "landing spot" for 15 minutes are minimal: he desires only cleanliness and good quality.

You don't have to leaf through volume after volume of complaint books to understand: the whole field of activity is sick. And it suffers from a chronic apathy. Attempts are made from time to time to cure it, but nothing much comes of it.



There is a large dining room--The Simbirka--in the center of Ulyanovsk. It is located in a special building, has a mechanized kitchen and has, in a word, everything it needs, and not just one of everything, but a number. Inspections are made here on a regular basis, now by the OBKhSS [Department for Combatting Theft of Socialist Property and Speculation], now trade inspections, now by the oblast newspaper, now by the local trade union committee of the "curing organization". And it's the same thing every time--cheating, false weights, improper enclosure, "non-observation" or unsanitary conditions. Each inspection is followed by reprimands, the deprivation of bonuses, and dismissals. The final result is that they replace the director. And things remain exactly as they were.

Why do the multitudinous efforts of the law-preserving agencies, of society, the national inspection agencies and agencies from other levels of the government have no effect?

They of the public catering administration, spreading their hands in a gesture of helplessness say, "We don't know."

It seems that the law, and here it's really even awkward to speak of the sector as a whole, has nothing to do with it, if it is powerless to get things going right in a single dining room.

Of necessity, there are only three of the open-type dining rooms in Ulyanovsk. The statute requires them to have 40 seating places for each one thousand townspeople, but there are only 13. The picture is clear, even without going on. Thence the serving lines, the filth and the unpalatable food. But why are there so few dining rooms?

"In recent years, funds for the development of social, cultural and welfare facilities have not been acquired," says A. Kovaleva, deputy oblispolkom chairman. "That is how the disproportion came about."

Specific officials have engendered this--and let's call a spade a spade--irresponsibility and this disrespectful attitude to the daily needs of the people. Thus one of the, as we say, local causes for the chronic failures of public catering comes to light.

Naturally, there are other causes. Local manpower can put an end to them, by not waiting for instruction circulars "from on high". Why not, for example, set up flow-line production? Why not have, in some of the dining rooms, mechanized centers for primary processing of potatoes and vegetables, and for the preparation of semimanufactures, sort of like initial processing shops for kitchens? Then the practice of sending half-cooked items to the table, as well as warming them up and frying them, will cease as well.

Nevertheless, in Ulyanovsk there is not a single open-type dining room receiving pre-peeled potatoes or vegetables. So we have cooks in dozens of dining rooms clattering about with knives, manually loading up their cookpots with potatoes and cabbage, carrots and beets, meat and fish....And all right, the cooks wouldn't have had mechanized lines for preparing vegetables. But they do exist! Some 6 t of potatoes and vegetables could be peeled at the Zasviyazhskiy Fruit

and Vegetable Combine, and could be delivered to the dining establishments, and the Zavolzhsk combine could handle even more. But they don't clean or deliver vegetables. Nor by the same token do they mince goulash ingredients or chop cutlets right in the meat packing plant or send whole sides of beef or pork to the kitchens. Fish processing combines do not clean fish....

There is another problem which has been completely permitted. Practice has made it clear that specialization helps to feed more people in better fashion by virtue of their choices being limited. Such foods as pancakes and pastries, meat dumplings and dairy products, shashlik and lamb pies are all highly profitable, simple to prepare and the cooks understand perfectly the finer points of one or two dishes. But for obscure reasons the switchover to specialization has been interminably drawn out....

Oh, my, this phrase "we make everything we can"! How often it conceals a basic ignorance of the business at hand, an incapability of catching sight of the prospects for its development, and a complacent reassurance in figures and indicators: "We Are Fulfilling the Plan!" But the plan for public catering, if one judges strictly, would have to be thought of as fulfilled only when there are no serving lines and no complaints in the complaint ledger.

I once asked the cook Kolya Kobaykin this question: "Here you have enough seating places for everyone, you won't have any problems with the dishes you serve, and we're introducing specialization--so are you in a good position to feed us?" He was silent for a moment, and then replied candidly: "No, we won't be." And added, "If they don't remove schnitzels from the inventory."

He had in mind the existing system of economic levers.

The diverse responses to the question of why they feed us so badly are well known. Usually they are reduced to the fact that "they pilfer, they carry off and they steal". Or: "They work poorly for poor wages, plus they work in a slipshod manner". And: "There are difficulties with the products, since the limits of the Food Program have not yet been achieved".

To say that there is no truth in these opinions is to dissemble. The chef who was working using "waste-free production methods" himself knew that he was preparing sausage meat from waste meat products. He himself had heard from the other cooks: "Symbolic work for symbolic pay." He himself had seen that not all orders for products were filled. And all the same, explaining the troubles of public catering only by this is the same as saying there is nothing to explain.

Those who work in this field have practically no incentive on their conscience to work diligently and constantly. A cook's work is not connected by the ruble with its most important result: high quality food. But in the event someone records in the complaint book or in a formal document that they had been fed with "underinvestments" or with "disruptions", then the cook is docked 15 percent of his wages. All of them.

"Dining Room Closed for Schnitzel Inventory". No, the famous phrase of Ilf and Petrov has not become out of date. And today there is a crowd of examiners and inspectors near the cookpot filled with cabbage soup.

At first glance the plan works fine. The cook has prepared the food. The "Wastage Inspection Commission" has evaluated the merits of the dish. The accountant has taken stock of the products received and produced. The trade inspectorate has inspected the assortment and quality of the food products. The OBKhSS has looked around to see if anyone has been stealing. The trade union activists have also put on their white coveralls and have gone to the kitchen and the dining hall to keep an eye on procedures there. Control, inventory, inspections--all up to par--but the cabbage soup? Garbage! Why? All the necessary ingredients were put into it, the cook tried his best and the "Wastage Inspection Commission" took a taste and thought it--excellent! But after the huge cookpot had stood on the burner all day, the cabbage soup had become the subject of a "rethinking". Why, you ask, did they not make several smaller batches of it in smaller pots so as to serve it fresh every time? Because this is not the sort of fuss and bother that gets the cook a raise in salary. So the upshot is that the schnitzels have been inventoried, but are not always edible.

It would be deceitful for me not to mention the fact that the public catering workers understand perfectly the harm inherent in the existing system. And it is as if they are seeking a new way of doing things. Thus the UkrNIITOP [Ukrainian Scientific Research Institute of Trade and Public Catering], a sectorial institute, has proposed that cooks be paid, not according to the total amount of money brought in by the dishes sold, but by the number of dishes prepared. And why not?

"We tried it, and it's a difficult system to operate," says V. Pavlov, chief of the department of public catering administration. "It's as if the methods used by the Ukrainian economists are forcing a turning away from the pursuit of costly dishes, so as to reap material well-being for diligence. But the stock-taking is already becoming too unwieldy. And this is the reason we are still by and large working just like we did before...."

The system of economic interrelations which now exists in the sector lies like an indestructible block in the way of any improvement or acceleration in the sector. Today, all initiative, all enterprise and all painstakingness are essentially bound hand and foot. How is the "point" of public catering to find new opportunities? Its plan has already been determined, the funds for the food products have been allocated and the necessary equipment has been acquired. All this has been done "on high". These days, the director of a dining room is purely an administrative figure. The dining room's work force has already been selected, the director doesn't do the accounting work or take care of the economics of the business, nor does he decide what the customers are to be fed (there is an "obligatory" assortment), and he has no hand in deciding what equipment to purchase and deliver, how many cooks and dishwashers to hire.

All of these things are taken care of by trusts and administrations. All the economic relations for these organizations with the public catering "point" are based on the so-called "non-full profit and loss accounting". This is precisely where the main problem lies. It is clear that only full profit and loss cost accounting and the complete dependence of each dining room worker on the final result of his labor can, in a natural and permanent way, set the business right.

At this point those in this sector are afraid even to think of such matters as changing the dining rooms over to a state of paying for themselves, to operating on an agreement basis with the administration, or to operating on contracts. Full, as opposed to partial economic accounting allows the kitchen workers themselves to make evaluations concerning what they will serve us for breakfast and for dinner, as well as the quantities and the portions. It forces them to look after these quantities themselves, not waiting for the decisions of a lot of inspectors, the good of which, as we have seen, is more mythical than real. It is namely full profit and loss cost accounting which will teach us to make both ends meet, to conserve food products and electric power, to operate profitably, and in accordance with this, to bring about increases in wages which, in every case, will be really earned. And finally this will make it possible, even in the face of the existing shortage of seating places, to bring about a marked improvement in service.

The sole advance which has been made today is that beginning in 1987 Mintorg [Ministry of Trade] will finally permit public catering subdivisions themselves to determine their number of workers...We speak candidly when we say that, this is the first step on a long road.

#### Trade Ministry's Policy Criticized

Moscow IZVESTIYA in Russian 9 Sep 86 p 3

[Article by V. Martynov, candidate of economical sciences: "A Cold Dinner: Why the Dining Room's Locked Doors Do Not Prevent Its Workers from Receiving Bonuses"]

[Text] I would like to return to the problem of public catering, which was raised in the article "Dinner in the Dining Room on the Corner" (IZVESTIYA, No 186), since it is one of our most acute social and economic problems, and must be resolved immediately.

The feelings and health of many millions of people--schoolboys and girls, students, workers and white-collar workers, passengers and tourists depend, in the most concentrated form, on public catering facilities. This critical item of the people's standard of living is a factor which affects the mood and the fitness for work of entire collectives. Flaws in its operation cause a great deal more harm than we imagine. And the most unpleasant thing is that the flaws are advancing here.

I am convinced that our public catering facilities are in need of a radical restructuring. There is a need to find a way to overcome, finally, the apathy apparent among those working in dining rooms, cafes,



snack bars, and restaurants, with regard to their customers. In not a single one of the public catering enterprises which I have visited in recent years have I felt that they were glad to see me or that they wanted to see me there tomorrow or the day after. There was neither a particle of hospitality nor a grain of attention or affability offered me. Quite to the contrary. It was as though all these establishments had "WE DON'T LIKE YOU--DO NOT ENTER" written in huge letters on their doors, on the menu forms and on the faces of the personnel.

But in fact such was not the case 20 or 30 years ago. And this is the truth, not merely the fault-finding of an old grumbler. I admit that almost every day I persuade my colleagues from work to go to a dining room for lunch. I explain to them how important to the health it is to eat at the proper time, and not cold food. But more often than not, people don't even want to hear about dining rooms. They contend that it is not necessary to dine in a dining room, even in a "closed" dining room, to preserve one's health. They pool their money, take turns going to buy food and eat at their work places.

But every time they have to run around the stores, they need plates and dishes, utensils and they have to set and then clear the table. They can't do all this (not to mention the trips back and forth). And the stores don't always have the things to eat that are necessary, and their lines are long. That is why a lot of people still avail themselves of the services of even the least popular. And public catering employees are well aware of this. "They want to eat," they reason, "so they come and eat what we give them." Herein lies one of the reasons for their "hospitality".

What causes a situation such as this? Specifically, it is caused by the fact that the plan assignments, according to the basic indicators--sales turnover, volume of in-house production output, profits--can be fulfilled by the public catering enterprises by another, easier method, i.e., by retail sales of their products. For example, if only 100 persons come to dine in a dining room rated to serve 500 persons per day, then this doesn't at all mean that the dining room is not fulfilling its plan, or that its workers will receive no bonuses or will not occupy class rankings for totals in socialist competition. Its dining halls can be, generally speaking, locked, but wages continue to be paid. It suffices to prepare a prescribed quantity of some sort of product (from cakes and pastries to sausage meat) and then sell them through stores and booths, or from a hawker's tray. And in the case which is worst for the consumer, they can also sell them without any processing.

The imperfection in the basic indicators is also, certainly, the primary reason for the unsatisfactory work done in public catering. They fail to direct the enterprises toward fulfilling their inherent functions--meeting the requirements of people for services connected with organizing their being fed in the places where they work, where they study, in the city streets and in other, non-domestic surroundings.

In order to eliminate the above reason for the imperfection which became evident a good while ago, no additional material outlays are required. All that is needed is a reorganization in planning, accounting and incentives. How is this to be done?

I believe that we need to introduce the practice of separate accounting of the results of the basic public catering activity in providing services to people relative to the setting up of their eating out, and in addition to keep records of those activities related to the production and sale of semimanufactures. Similar steps, it should be pointed out, are being taken in the area of providing amenities for the population, where the volume of individual services carried out is (or ought to be) under particular scrutiny.

The results of the basic activity--the retail cost of the food products, plus the services connected with organizing the demand for these products--are exactly what should be used as the basic indicator for the plan and to evaluate the activities of the public catering enterprises. The sector's assignments need to be set from above. The carrying out of these assignments will form the basis for evaluating work, paying bonuses and conferring class rankings in accordance with competition results. But it would be advisable for additional work to be prescribed in the enterprises themselves based on their production capacity, their materials and on popular demand.

On the other hand, the public catering enterprises are presently in need of the right to make independent decisions regarding: what sort of products to make and the quantities of these products, and which products to order elsewhere. For the present, the plan assignments for the volume of in-house production of food products are forcing the public catering sector to refuse to have anything to do with the industrial production of output ready for consumption. This is the reason, for example, that one sees no industrial production of shortbread or gingerbread in the dining rooms or snack-bars. Nor does one see the ring-shaped sushka crackers or mineral water or fruit drinks. The little jar of boiled fermented milk, or sour clotted milk, the glass of pasteurized milk or kefir, juice, ice cream...have all become rarities.

Even though USSR Mintorg and USSR TsSU [Central Statistical Administration] have for some time allowed all these items to be considered as part of in-house production output, far from every director of a dining room has agreed to pass off black as white. They are demanding the in-house production from him: the very items he offers to his customers. In order for the enterprises which are developing their in-house production to become oriented towards supplying products from outside sources, they will need very strong incentives. But there are no such incentives.

It is time to realize that the principle of the collective contract must be made the foundation of material incentives in public catering also. In accordance with an agreement, the collectives of these enterprises take these responsibilities upon themselves: to render services to organize the feeding of a prescribed number of people while observing the output production quotas, the pricing norms, the service regulations and sanitary and other requirements. It is the management itself which allocates the collectives' necessary products, as well as their material and technical equipment. The profits made after deductions for necessary outlays and standard deductions are distributed among the collective's members according to their labor participation in the overall work.

Unfortunately, USSR Mintorg doesn't agree with these methods for curing the ills of public catering. And here it is not just a matter of pride. The problem is far more serious. Mintorg is proceeding from an erroneous interpretation of the role of the public catering enterprises, in seeing them as some sort of stores for selling goods which have been produced for the most part in-house. It is precisely for this reason that the sector's basic reserves are tied up in increasing goods production and sale and not in rendering high-quality services to the greatest number of people.

Certainly the production of goods and their sale is a more tangible, more normal affair in comparison to giving services. Moreover, the production of semimanufactures is, as is commonly known, of great help to housewives. (And that's true: the production of these items--from sandwiches to salads and garnishes--ought to be far greater, and they also need to be sold in special departments of food stores, something we, for some reason, do not practice). But here we must understand clearly that using public catering enterprises as a game of hide-and-seek between the food industry and trade incurs not so much benefit as it does harm. In acting in this fashion we hinder the development of industrial production of culinary products to a definite degree, while deliberately proceed toward increasing outlays for labor and materials. At the same time--and this is the main thing--as a result of the fact that the public catering enterprises are to a great extent involved in affairs other than their own, they are not meeting the people's needs for those services which these enterprises were set up to provide. Here, the state loses a tremendous sum. Unfortunately, the new conditions for economic operation, which were adopted recently, and which are to be introduced in 1987, still make no provision for any sort of change in the orientation of our public catering enterprises and organizations.

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CSO: 1827/5

## PERSONAL INCOME AND SAVINGS

### ALLOWANCES TO MOTHERS OF LARGE FAMILIES DISCUSSED

Moscow ARGUMENTY I FAKTY in Russian No 18, 29 Apr-5 May 86 pp 4-5

[Interview with N.V. Kuznetsova, chief of the Social Security Administration of the USSR State Committee for Labor and Social Problems, by correspondent G. Valyuzhenich: "Caring for A Large Family"]

[Text] The published material in ARGUMENTY I FAKTY, No 6, about the Semkins' large family has resulted in many letters from readers. Analysis of the mail showed that the subject referred to concerns many people. And this is understandable, for there are now more than 17 million large families in our country.

The questions raised by the readers have served as the basis for a discussion by our correspondent G. Valyuzhenich with N. Kuznetsova, chief of the Social Security Administration of the USSR State Committee for Labor and Social Problems.

[Question] Nina Viktorovna, please tell us first of all what kind of family is considered a large family?

[Answer] It is impossible to give a simple answer to this question. It is determined in different republics by a varying number of children. Thus, for example, in the RSFSR a large family is considered one that has three children, in the Kazakh SSR--four and, let us say, in Azerbaijan SSR--five. Such a differentiation is to be explained by the special features of demographic processes in each individual republic.

[Question] All of us understand that children's upbringing is associated with tremendous cares. And our readers frequently point out in their letters that large families have to face material difficulties. You have to agree that if both parents work and there are, let us say, five children in the family, it is not easy to live on this pay.

[Answer] Of course. That is why our state constantly strives to lighten these difficulties, providing large families with all kinds of aid, including material aid, which with the development of our society will grow and expand. This is discussed in the documents of the 27th Party Congress.



Popular wisdom states: "The more children there are in the family, the stronger it is. Perhaps, it could be added--the stronger it is, the stronger is our society and the more real and potential resources and possibilities we have for further development.

[Question] Could you possibly tell us what material assistance to large families consists of in our country?

[Answer] First of all in the fact that mothers with four children receive monetary allowances. Should there be more children, then the size of the allowance is raised accordingly. But in any case, these allowances do not depend on the earning level of the parents. Moreover, families in which the average combined income per family member does not exceed 50 rubles a month (in the regions of Siberia, the Far East and northern regions of the country--75 rubles) are also paid an allowance for each child up to 8 years of age. Incidentally I want to point out that provision is made in the 12th Five-Year Plan to increase the age of children for which these allowances are paid.

In addition, every woman is provided with a partially paid leave of absence for caring for a child until it reaches one year of age. She is also paid a one-time grant on the occasion of giving birth to a child. In the current five-year plan, it is planned to increase prenatal leave and the duration of payment to one and a half years as well as payment for the time spent on caring for a sick child and to introduce free issue of medicines for children up to three years of age.

[Question] Nonetheless, this assistance most likely cannot compensate for all the expenditures of a large family?

[Answer] It is impossible to speak here of all families. Furthermore, we have not mentioned as yet the many benefits provided by the state. Take, for example, the fact that for many large families payment was reduced for maintenance of children in kindergartens and nurseries. Inadequately provided for children attend for free. In these cases, the state to whom the maintenance of the child in preschool institutions costs almost 600 rubles a year assumes partially or completely the care of the child. Passes to pioneer camps and sanatoriums for large families are issued free as a rule.

A very important fact is that for parents with three or more children under 16 years of age (and students under 18), the allowance for temporary incapacitation is 100 percent of their pay regardless of the duration of continuous work service.

And one more consideration. Everybody knows that payment for housing in our country is low. But local soviets of people's deputies are given the right to institute price reductions for apartment payments for families with four or more children.

Thus, if you were to add up state aid, it would turn out to be quite significant and substantial for a family.

[Question] Children are children. They are loved everywhere. It is therefore no accident that you can often find in Western journals happy children's faces symbolizing security and tranquillity. Reader A. Chernov from Zaporozhye is interested in whether allowances exist for children in capitalist countries and whether any other assistance is provided there for families with children.

[Answer] Family grants as an independent form of social security are less prevalent in capitalist countries. It is enough to say that state grants for children are provided in only 65 countries. In the United States, such allowances have not existed so far. True, local authorities in the country have a program of assistance to needed families with children. However, the scope of its reliability may be judged if only from the following fact. The recent reduction of allotments by 13 percent for this program deprived aid to 365,000 families with children.

In the FRG, Japan and other countries, allowances are paid to families with three or more children and depend on the size of the family income. Moreover, in the great majority of cases, a miserly allowance for children is the only one on which a large family can count upon.

[Question] Nina Viktorovna, let us return to our problems. We know that large families in accordance with Fundamentals of USSR Housing Legislation have the right to first-priority securing of housing. But, judging by letters, not everything is going well for us in this field. What can you tell us in this regard.

[Answer] Yes, unfortunately, not all large families are provided with the housing area prescribed for them. This is largely to be explained by the fact that the housing problem has still not been solved for the country as a whole and sometimes, it should be said outright, with insufficient attention from the local authorities. But nonetheless, the housing conditions of these families certainly cannot be compared with those in which many large families are obliged to live in the capitalist countries. I would like to bring to mind the following fact not as justification or consolation, but simply on the plane of comparison with the West.

Recently PRAVDA published an item about a Frenchwoman B. Evellayr, a mother of five children, who was forced to live together with them in a rusted through car. You will agree that it would be difficult to imagine such a situation in our country.

[Question] Readers often ask whether local soviets provide any additional assistance to large families. Could you tell us something concerning this in greater detail?

[Answer] Actually, the well-being of large families depends a great deal on local soviets, organizations, institutions and labor collectives. So as not to be without proof, I shall cite several examples. Thus, at Vilnius Leliya Production Association, Shaulyay Elyanyas Leather Footwear Association and several other enterprises in the Lithuanian SSR, aside from the fact that mothers having many children are given the opportunity to work a partial

workday they are provided with one-time material assistance and are issued free passes to rest centers and pioneer camps. Funds from enterprises go to pay for breakfasts and lunches in schools, medicines are purchased. Some enterprises, for example, Radvilishkis Agricultural Machinery Plant, exempt all large families living in departmental houses from paying apartment rent.

A great deal of assistance is provided large families on kolkhozes in Lithuania. They are the first to be issued construction materials for building and repairing houses, loans are provided at preferential conditions and houses are frequently built with kolkhoz funds. For example, in Klaypedskiy Rayon in 1984, housing conditions were improved for 85 large families. Some kolkhozes issue one-time grants to large families whose amount is as much as 200-350 rubles on some farms.

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Expenditures from the USSR State Budget on Payment of Allowances to Mothers, Training and Care of Children (millions of rubles)

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	1970	1984
Allowance for pregnancies and births, for birth of a child, for care of a child to 1 year of age	866	3,500
Allowances to mothers with many children and to single mothers	435	566
Allowances for children of inadequately provided for families	--	751
Expenditures on caring for children in children's homes, preschool and extra-school institutions	4,298	8,461
Expenditures on maintenance of day general educational schools and school boarding facilities	6,604	10,040

[Question] Bringing up children is tremendous work which probably can be considered the equal of any other job. Is it reflected in pension provisions for mothers of many children?

[Answer] Of course. All periods relating to the birth of a child are included for mothers in general work service. Women with five or more children, who bring them up to 8 years of age, receive a pension with a 15-year work service on attaining 50 years of age. They are also granted on

preferential conditions the right to a pension in the case of partial work service.

In addition, our state highly values the work of mothers. Thus, women who have brought up 10 children are conferred the honorific title Heroine Mother and are awarded an order. At the present time, they number 383,000 in the country. More than 5 million women have been awarded the Maternal Glory Order and 12 million the Maternity Medal.

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CSO: 1827/3



## FUELS

### ROAD CONSTRUCTION IN YAMAL

Moscow GAZOVAYA PROMYSHLENNOST in Russian No 6, Jun 86 p 8

[Article by A. G. Polunovskiy and Yu. Lvovich, State All-Union Scientific Research Institute of Roads and Highways: "Main Condition -- Integrated Approach"]

[Text] Road construction under the conditions of permafrost soils requires special scientific, normative and methodological support of construction. Scientific organizations must cooperate closely with designers, builders, consumers and operation services for the purpose of efficient evaluation and verification of the effectiveness of proposed technological and design solutions.

SoyuzdornII [The State All-Union Scientific Research Institute of Roads and Highways], jointly with TsNIIS [Central Scientific Research Institute of Transportation Construction], has developed special norms and specifications for design and construction of automobile roads on the Yamal Peninsula.

On the basis of the analysis of engineering, geological and geocryological information, basic variants of design solutions are being developed on the construction of automobile roads. The design solutions will provide for: rational construction of a route in plan and longitudinal profile on the basis of the selection of a guiding reference mark and the principle of ensuring stability for a specific region, basic variants of job performance techniques with consideration of the use of summer and winter periods, structures of the ground bed, type and state of the soil and time of construction.

Motor vehicle roads should be constructed in accordance with a job execution scheme developed on the basis of a construction organization scheme. It must reflect the deadlines and the techniques of the execution of work processes with consideration of the adopted principles of designing, structures of the ground bed, road surfaces and special structural elements on the basis of specific engineering, geological and geocryological conditions of the area.

When compiling the job performance scheme, it is necessary to develop organizational and technological measures which would include a rational distribution of the volumes of earthwork for building during winter and summer periods with consideration of the principles of using roadbed soils in a frozen or thawed states; procurement of maximum volumes of soils during the summer period at

quarries; determination of the means of mechanization for ensuring the procurement of soil, its processing in a thawed or frozen state, construction of the ground bed and road surfacing during summer and winter periods.

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## FUELS

### WATER AND SEWAGE PROBLEMS IN YAMAL

Moscow GAZOVAYA PROMYSHLENNOST in Russian No 6, Jun 86 p 9

[Article by S. S. Bogolyubov, State Design Institute "Vodokanalproyekt": "Orientation Toward Advanced Solutions"]

[Text] Under the severe arctic conditions of Yamal, water-supply and sewage problems can be solved only in an unconventional way and only on the basis of the development of the latest materials and equipment.

First of all, it is necessary to minimize the consumption of fresh water for industrial needs or eliminate it completely. Therefore, when developing technological processes of the recovery and transfer of gas, as well as accompanying processes, it is necessary to be oriented toward a waterless technology. It is necessary also to lower as much as possible the normative water consumption for sanitation engineering needs but to maintain the necessary comfort by using new types of special sanitation engineering equipment.

The construction of permanent water-intake and water-lifting structures has no analogs under the Yamal condition. Studies of this problem indicate that, unlike the conventional buried concrete structures, it seems practical to switch to new designs of water-intake structures with the use of submerged pumps installed in vertical well pipelines with a diameter of 1.4-1.8 m. However, from technical and economic considerations, it seems also expedient in these conditions to design water-intake structures with the use of submerged pumps installed in a slanting pipeline. This yields a huge economic effect, practically minimizing the volumes of earthwork during the construction of water-intake structures.

At the present time, process flow diagrams have been developed for purifying water for drinking and industrial water supply from surface sources under the condition of the Extreme North. However, it is difficult to realize them because the necessary equipment for this purpose is produced in limited quantities.

The problems of drainage and treatment of sewage water, i.e., the problem of sewage systems, is of great interest. All processes of equipment washing with water must be replaced with similar processes with the use of dry operations or cleaning solutions used in a closed cycle. The conventional sanitary engineering devices in houses must be replaced with devices using limited amounts of water. It is necessary to develop water recycling schemes, which will make it possible to sharply reduce the volumes of sewage water, facilitating the solution of ecological problems.

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## FUELS

UDC 622.243.23:622.241.54

### WELL DRILLING IN YAMBURG

Moscow GAZOVAYA PROMYSHLENNOST in Russian No 6, Jun 86 pp 10-11

[Article by P. N. Grigoryev, M. M. Shalyapin and O. V. Sorokin, Tyumen Scientific Research Institute for Designing Gas Pipelines and Gas Industry Enterprises: "Promising Method of Well Drilling in Yamburg"]

[Text] Directional drilling of the first slant holes in large well clusters of the Yamburg fields for the first time in the northern gas fields of the USSR yielded a positive experience in the construction of large-diameter slant holes under complex natural and climatic conditions.

The successful introduction of the drilling techniques of slant gas holes with an inclination angle increase in the running-in interval of a 219 mm diameter flow tubing made it possible to solve a design problem: to ensure the deviation of cluster wells from their heads of up to 200 m at a depth of the top of the Senoman-stage deposits.

The bulk of the production of natural gas in the Twelfth Five-Year Plan will be achieved through the development of the Yamburg fields. In order to solve successfully this important national economic problem, the most optimal variant for the development of the field was determined: by large clusters of slant holes. Under the complex natural and climatic conditions of the Yamburg field, expenses on the construction of a multiple-well site constitute a considerable part of the total expenditures on the construction of the entire cluster of wells. In connection with this, the method of construction of clusters of four vertical gas wells which was used earlier becomes ineffective. The introduction of slant drilling made it possible to group eight large-diameter gas development wells on one multiple-well platform and to reduce the distance between the well-heads from 70 to 40 m. When constructing one large cluster of slant wells instead of two clusters of vertical wells, the expenses on the preparatory and rig-up jobs are reduced by more than 220,000 rubles.

According to the development program, two wells in large eight-well clusters are drilled by the vertical method and six are drilled by the directional slant method. The sequence of drilling is based on the condition of the separation of the holes of cluster wells in zones safe for mutual crossing. The most rational method is to drill the second and seventh cluster wells vertically.



Cluster wells have a three-string structure, the course of the hole with a diameter of 426 mm goes down to a depth of 150 m, a surface casing with a diameter of 299 or 324 mm plugs up rock unstable in drilling with negative temperature to a depth of 550 m, flow tubing with a diameter of 119 mm is lowered vertically to a depth of 1180 m.

The drilling of inclined cluster wells is done by a three-interval profile. The section of the inclination angle increase is planned in the interval of the lowering of the surface casing or the flow tubing with subsequent stabilization of the curvature parameters of the hole to the top of the Senoman-stage deposit. During the drilling of the first nine slant wells, slant holes were drilled below the setting depth of the vertical surface casing string. When drilling an inclined hole from a depth of 580 m, in order to achieve the designed deviation of the well of 250 m at the depth of the top of the Senoman-stage deposit, it is necessary to set the inclination angle of the hole at 35 degrees with the turbine deflector TO-240 with a 1.25-150 degrees bent sub between the spindle and the section. The actual intensiveness of the borehole deviation in the section of the inclination angle increase for the deflectors with the above-mentioned angles of thread curving of bent subs is 1.2-1.7 degrees in 10 m of penetration.

The analysis of the intensity of borehole deviation of slant wells and the results of the passage of straight stiff bottom-hole drill stem assembly through the interval of inclination angle increase showed that the most optimal deflecting assembly ensuring an increment of the inclination angle of not more than 1.5 degrees in 10 m of penetration is a turbine deflector TO-240 with a bent stub of 1.25 degrees. With this deviation intensity, the running-in of a two-section turbodrill TSSh-240 with an above-bit calibrator on the spindle shaft through the interval of inclination angle increase presents no complications. Constant calibration of the borehole with above-bit calibrators the diameter of which is equal to the diameter of the bit is the necessary requirement for preventing the spudding of the second holes when drilling from under the surface casing string to the Senoman formation top, particularly when drilling with a deflector. When drilling interval of inclination angle increase, a 6-8 m long UBT with a diameter of 203 or 229 mm is included in the assembly of the turbine deviator, which corresponds to the stiffness along the two-section TSSh-240.

In the process of refining the techniques of slant drilling, results were obtained for controlling the trajectory of the borehole when drilling and inclined rectilinear interval. Thus, when well 2106 was drilled, the angle of inclination at the end of the interval of drilling with the deflector was 22 degrees against the design angle of 35 degrees. By using a certain assembly in the interval of 782-964 m (bit 295.3 M-GV, spiral blade calibrator KLS-295, two-section TSSh-240), the angle of inclination was increased with an intensity of 5.6 degrees in 100 m of penetration. When well 2105 was drilled, in the interval of 749-973 m with the same assembly, but with one section of the turbodrill, the intensity of the increase in the angle of inclination was three degrees in 100 m of penetration and the angle of inclination was increased from 32 to 37 degrees.

Preliminary analysis of the operation of unoriented straight assemblies showed that the angle of inclination increases under the following conditions: the use of above-bit calibrator of a nominal diameter, absence of free play or minimal

(not more than 2 mm) radial play of the spindle shaft of the turbodrill. Centralizers on the body of the turbodrill were not used in testing unoriented assemblies.

In 1985, the construction of the first large cluster 210 was completed. It consists of seven development wells and one observation well. Seven of the nine wells of the second large cluster 211 have been drilled, including four by the directional slant method.

The low commercial speeds of drilling inclined wells 2105, 2106 and 2111 were due to faults in the refinement of the techniques of drilling and casing. For example, during the running-in of a straight assembly, a second hole was drilled in well 2105 in the interval of 580-1010 m due to proper performance of borehole reaming jobs. After placing a cement bridging plug a third hole of the well was bored from a depth of 575 m with a design deviation within the prescribed target area on the top of the Senoman formation. Corrections of the faults due to poor-quality cementing of the flow tubing in well 2106 took 1221 hours of calendar time.

When there is a small gap between the flow tubing with a diameter of 219 mm and the borehole the diameter of which is 269.9 mm, there are special requirements for the preparation of the borehole and technological equipment for the running-in and cementing of the flow tubing. The cementing of flow tubing in slant wells 2105 and 2107 of the cluster 210 was done under higher pressures at the beginning of the pumping of the plugging solution. The drilling and casing of the subsequent cluster slant wells was done without any complications with commercial speeds exceeding the speeds of drilling of a number of vertical cluster wells. All of the slant cluster wells drilled into the top of the Senoman formation with prescribed (from 170 to 250 m) deviation of the holes from the well-heads.

The experience in the drilling of the first nine slant wells in large clusters at the Yamburg field confirmed that the introduction of the slant drilling of gas development wells is promising. It will be possible to reduce the construction time of large clusters by improving the techniques of drilling, casing and cementing and by introduction of the most optimal profile of slant wells, arranging the section of inclination angle increase in the interval of drilling under the surface casing string. The development and introduction of these measures will make it possible to raise the effectiveness of the construction of large clusters not only by reducing the expenses on preparatory and derrick-erection jobs, but also by reducing well drilling expenses.

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FUELS

UDC 622.279.5

MEDVEZHYE GAS RESERVES

Moscow GAZOVAYA PROMYSHLENNOST in Russian No 6, Jun 86 pp 11-12

[Article by O. M. Yermilov, Ye. M. Nanivskiy, V. V. Strizhov, V. A. Fatikhov and V. A. Tugolukov, TyumenNIigiprogaz, Nadyngasprom]

[Text] In order to ensure the planned gas recovery in 1986-1987 with an allowance made for the delays in drilling additional wells and construction of DKS [booster compressor stations], it is recommended to change the present gas flow diagram, transferring UKPG-9 [complex gas treatment plant] to the Yamburg-Yelets gas pipeline.

It was planned to maintain the period of continuous recovery at the Medvezhye field through 1987, and then to lower gas production there.

On the basis of a complex analysis of the geological data on the field and investigations on the reserves of the system productivity, it was established that, due to the production potentialities of the stratum, the nature of its water encroachment and current reserves, it is possible to lengthen the period of continuous production. However, this will require additional capital investments into its development (drilling additional development wells, construction of connecting pipelines for them and timely completion of first and second priority booster compressor stations). According to this variant of development, the annual recovery of gas from the field is set at the existing level up to 1990. In 1985-1990, it is necessary to drill and construct 55 additional development wells (it was planned to drill 18 of them in 1985-1986). It was also necessary to ensure the completion of first priority DKS at the following times: at UKPG-6 -- in 1985, at UKPG-9, 5, 4 -- in 1986. Actually, there are considerable delays in the construction of surface field facilities.

In connection with the above, the following problems are examined in this work:

to what extent the delay with the completion of the first-priority DSK 6, 5, 4, 9 and with the drilling of additional wells will affect the level of gas recovery in 1986-1987 (i.e., until the time when all first-priority DKS are actually put into operation);

with what measures it will be possible to find a temporary way out of the situation and ensure the planned gas production in 1986-1987.

**Gas Recovery from Medvezhye Field  
(in % of planned annual extraction)**

Year	Quarter	Variant			
		I	II	III	III-I
1986	I	24.65	24.65	24.67	0.016
	II	24.93	24.93	24.93	—
	III	23.72	24.98	25.20	1.481
	III	25.20	25.20	25.20	—
	I-IV	98.50	99.76	100.00	1.494
1987	I	24.13	24.40	24.65	0.518
	II	23.06	24.45	24.76	1.706
	III	19.29	22.93	23.91	4.617
	IV	23.46	25.20	25.20	1.740
	I-IV	89.94	96.98	98.52	8.581

The necessary calculations were done on the basis of the technological behavior of the wells of each UKPG obtained according to the data of a geological analysis of the field. It should be mentioned that the optimal values of the technological behavior of wells and, consequently, those of UKPG, decrease with time. It was assumed by us that this decrease is compensated by the introduction of new wells.

According to estimates by experts, it is possible to take the technological behavior of 1985 for calculation in 1986-1987 if 12 additional development wells are added in 1986 and 24 in 1987 (in running total to the stock of 1985).

The efficiency of each UKPG was calculated depending on the changes in the pressure at the inlet of GKS [gas-compressor station] over a year (according to the data for the preceding year), and the predicted drop of the reservoir pressure at UKPG with time.

The results of the calculation of gas recovery from the Medvezhye field in 1986-1987 with UKPG-1-9 operating according to the present scheme are shown in the table (the first variant is the basic variant). As can be seen from the table, the recovery of gas in 1986 will amount to 98.5% of the planned data, and in 1987 -- 89.9%. The decrease in the gas recovery according to the basic variant is due to a considerable delay in the completion of DKS-4 5, 6, 9 against the planned deadlines and, as a result, underloading of the wells of these UKPG below the optimal technological conditions due to the insufficient pressure between the stratum and MPK. This occurs particularly during the summer months when the pressure in MPK increases greatly.

The analysis and calculations for exploring the reserves in the productivity of the systems showed that, in order to fulfill the plan for 1986-1987, it is of interest to divert part of the gas flow to the Yamburg-Yelets gas pipeline through a connecting line between MPK in the area of UKPG-9 and the 180-304 km section of the Yamburg-Yelets gas pipeline. The implementation of these recommendations will make it possible to avoid transit gas flows in a volume of approximately 25% of the total volume of the transported gas, and, accordingly, pressure losses, which, in turn, will lead to a drop of pressure in MPK (with the same inlet pressures at GKS) and an increase in the gas recovery from UKPG-4,



5, 6, 9 in relation to the basic variant. It is assumed that the pattern of gas flow from UKPG-1-8 through the main gas pipelines will remain the same as that before the switching of UKPG-9 to the Yamburg-Yelets pipeline.

In accordance with the above, the following additional variants of gas recovery from the Medvezhye field were calculated with an allowance made for diverting part of the flow to the Yamburg-Yelets pipeline:

operation of UKPG-1-8 and half of the gas flow of UKPG-9 to GKS, half of the gas flow of UKPG-9 to Yamburg-Yelets pipeline (variant II);

operation of UKPG-1-8 in GKS, UKPG-9 to Yamburg-Yelets gas pipeline (variant III).

It can be seen from the table that it is more effective to switch UKPG-9 completely to the Yamburg-Yelets pipeline. This variant provides an increment in gas recovery in relation to the basic variant in 1986 of 1.5% of the planned production, in 1987 -- by 8.58% and ensures the fulfillment of the plan in 1986.

In 1987, even if UKPG-9 operates in the Yamburg-Yelets pipeline, the production of gas, according to calculations, will amount to only 98.52% of the planned production. Therefore, in order to fulfill the production plan, it will be necessary to put into operation 20 development wells in 1987 instead of 12 (as was considered initially in the calculations).

On the basis of the calculations and analysis of the obtained results, the following should be done in order to increase the reliability of operation and maintain the planned levels of gas production with consideration of the necessary volume of repair operations, as well as the real deadlines for the construction of surface facilities at the Medvezhye field:

in 1986, to put into operation 12 additional development wells and the third line of MPK in the second quarter. To ensure continuous delivery of gas from UKPG-9 through a connecting line to the Yamburg-Yelets pipeline beginning in the first quarter of 1986 (without changing the gas flow diagram in the trunk gas pipelines from UKPG-1-8);

In 1987, to implement measures for putting wells into operation in 1986. To connect 20 additional development wells. To ensure continuous gas delivery from UKPG-9 through a connecting line to the Yamburg-Yelets gas pipeline (without changing the gas flow diagram in the trunk gas pipeline from UKPG-1-8).

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## FUELS

### INCLINED WELL DRILLING

Moscow GAZOVAYA PROMYSHLENNOST in Russian No 6, Jun 86 p 13

[Article: "Acceleration of Inclined Well Drilling"]

[Text] Considerable advances have been made in recent years in the techniques and technology of drilling slant wells, and the technical, economic and quality indexes of their drilling have been improved. However, a number of urgent problems of the theory and practice of slant drilling have not yet been sufficiently solved and introduced. According to the adopted technology of drilling slant wells, an increase in the inclination angle and the direction of the hole toward the planned azimuth are achieved with the aid of an oriented deflector. In this case considerable means and time are spent on the performance of specific jobs for controlling the deviation process. In this connection, it is important to reduce the interval of drilling with the use of a deflector and to increase the intervals where unoriented bottom-hole drill stem assemblies (KNBK) are used.

It is also urgent to design the profile of the slant well with consideration of specific geological and technological conditions of well drilling at the fields, to develop and introduce technological means for drilling wells in the planned azimuth from the vertical hole, to control the well azimuth without the use of a deflector, and to perform control measurements of the parameters of well deviation without raising the drill stem.

The purpose of Yu. M. Kuliyeu's dissertation was to improve the technology of drilling slant wells and to increase its efficiency by developing and introducing a rational profile, a curved direction oriented in a planned azimuth, as well as by improving the design of equipment for oriented and nonoriented control of the well deviation process.

He was first to develop a method of drilling slant wells with the use of a curved direction ensuring the achievement of the planned azimuth and deviation of the well bottom from the vertical without the use of a deflector by means of nonoriented KNBK. Studies were done on an unoriented KNBK which included a bit and a calibrator in combination with a centralizer on the body of the downhole motor with allowance made for the pliability of the well walls.

The method of drilling slant wells with the use of a curved course is of important practical significance, since it makes it possible to minimize the difference between the technology of drilling of slant wells and vertical wells by

eliminating such technologically complex and specific operations as the orientation of the deflectors and adding a length of drill pipe to the drill string according to marks. The introduction of the method will make it possible also to reduce the value of the resistance force during the shifting of the drilling and casing strings in the well due to a smoother and relatively low-intensity increase in the deviation angle which is achieved by the use of unoriented KNBK. This ensures a failure-free and high-quality drilling of slant wells with high technical and economic indexes. The use of calibrators in combination with a centralizer and without a centralizer makes it possible to increase the range and effectiveness of the use of unoriented KNBK and contributes to an increase in the speed of drilling and reducing the possibility of the sticking of tools through the separation of the lower, the most stickable part of the drilling stem from the walls of the well.

The proposed improved device for the orientation of the deflector in the vertical hole which includes a magnetic sub and thick-walled easily fusible drilling pipes intended for slant wells where the increase of the zenith angle is done with the use of a deflector will make it possible to sharply increase the effectiveness of the performance of this important operation. The use of spiral stabilizers of a new design contributes to the solving of the problem of changes in the azimuth of the borehole without the use of a deflector and is of a very important practical significance in drilling deep and superdeep slant wells.

The basic results of these studies have been introduced at the drilling enterprises of the production association "Mangyzhlakneft".

The curved course used repeatedly was used in 25 wells. The annual economic effect from its introduction amounted to more than 130,000 rubles.

More details of this dissertation are available in the fundamental library of AzIneftekhim [Azerbaijan Petrochemical Industry Institute] imeni N. Azizbekov.

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CSO: 1822/314

LABOR

NEW DECREE ON EXPANDING RIGHTS OF MANAGERS

Moscow SOBRANIYE POSTANOVLENIY PRAVITELSTVA SOYUZA SOVETSKIKH  
SOTSIALISTICHESKIKH RESPUBLIK (OTDEL PERVYY) No 23, 1986 pp 397-399

[Decree No 133 of the USSR Council of Ministers On Expanding the Rights of  
Managers of Associations, Enterprises and Industry Organizations in  
Strengthening the Work Force]

[Text] For the purpose of further strengthening the role of economic methods  
of management and expanding the rights of managers of associations,  
enterprises and organizations of industry, the USSR Council of Ministers  
decrees:

1. To revoke as of 1987 the limits established for associations, enterprises  
and industry organizations on the number of personnel in the management  
apparatus designated by the 1 October 1981 Decree No 960 of the USSR Council  
of Ministers, as well as the allotted limits set for the composition of  
management apparatus personnel.

2. To introduce normative planning of the wage fund for management,  
engineering and technical personnel and other employees.

To establish that a higher organization determines for associations,  
enterprises and industry organizations the wage fund norms for management,  
engineering and technical personnel and other employees as well as wage fund  
norms for designers, technologists and scientific personnel.

Managers of associations, enterprises and organizations approve the staff list  
of management, engineering and technical personnel and other employees based  
on the wage fund determined according to the approved norm.

3. To introduce a procedure in which the norms of the wage fund specified by  
Paragraph 2 of the present decree are worked out and approved:

for USSR ministries and departments and union republic councils of ministers  
by USSR Gosplan and the USSR Ministry of Finance;

for associations, enterprises and organizations by appropriate USSR ministries  
and departments and union republic councils of ministers;



for structural subdivisions of associations, enterprises and organizations by the managers of these associations, enterprises and organizations.

For USSR Gosplan and the USSR Ministry of Finance to establish before 1 September 1986 for USSR ministries and departments and union republic councils of ministers for the years of the 5-year plan progressive wage fund norms for management, engineering and technical personnel and other employees in percent of the total wage fund of all personnel, providing for a reduction in the size of this category of personnel.

For USSR ministries and departments and union republic councils of ministers to ensure prior to 1 October 1986 the development and differentiated reduction of stable norms for the 12th Five-Year Plan to associations, enterprises and organizations of industry. The indicated norms will not be subject to change in the course of the 5-year period.

4. For the USSR State Committee for Labor and Social Problems, USSR Gosplan USSR State Committee for Standards and the USSR Central Statistical Administration to submit prior to 1 September 1986 the necessary revisions in the position classification of management, engineering and technical personnel and other employees in accordance with present requirements of production and scientific and technical progress.

5. Managers of associations, enterprises and industry organizations bear personal responsibility for irrational expenditures of the money of the wage fund of management, engineering and technical personnel and other employees and implement organizational and technical measures aimed at the systematic improvement of production management and the reduction of positions for which there is no productive need.

For USSR ministries and departments and union republic councils of ministers to secure strict control over the correctness and effectiveness of expenditure of the wage fund of employees, detecting and putting an early stop to cases of illegal expenditure of funds for these purposes.

To establish that in the case of violations in the use of the wage fund for this category of workers, approved norms are reduced.

6. For the USSR Central Statistical Administration to report each year to the USSR Council of Ministers on the actual number and structure of management, engineering and technical personnel and other employees according to USSR ministries and departments and union republic councils of ministers.

N. Ryzhkov  
Chairman of the USSR Council of Ministers

M. Smirnyukov  
Administrator of Affairs of the USSR Council of Ministers

Moscow, The Kremlin, 15 May 1986, No 563.

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CSO: 1828/139

## RAIL SYSTEMS

### RAIL TRANSPORT STATISTICS FOR JANUARY-SEPTEMBER 1986

Moscow GUDOK in Russian 23 Oct 86 pp 1-2

[Article based on materials of the Accounting and Bookkeeping Administration: "From Border to Border--Review of Rail Transport Operations for the First Nine Months of 1986"]

[Text] In a state of high labor and political activity, rail workers are preparing to observe the 69th anniversary of the Great October Socialist Revolution. Overall, the railroad network has fulfilled its plan for shipments in the nine months seven days ahead of time. The majority of collectives succeeded in increasing the efficiency and quality of their work.

The majority, but not all of them. By no means everywhere are rail workers doing everything required of them. Not everywhere are they working in coordination with their associates and customers, and this has led to excessive railcar demurrage, and ultimately to considerable losses in shipping resources. Losses of goods en route and nonproductive expenditures are still too high. The state of affairs regarding traffic safety is cause for alarm. Progress has been slow in eliminating shortcomings in passenger service, and there were numerous instances of late trains.

What have been the main indicators of rail transport operations for the first nine months in the first year of the 12th Five-Year Plan?

National economy freight weighing 3.052 billion tons was moved, thus exceeding the plan task by 79.5 million tons (2.7 percent). Growth figures for the corresponding period of last year were 127 million tons and 4.3 percent.

The forwarding plan was fulfilled for all goods except timber and refractory materials. Increase in shipments of hard coal exceeded plan by 14 million tons, of oil products by 3 million tons, of iron and manganese ore by 8 million tons, of ferrous metals by 5 million tons, of industrial raw materials by 4 million tons, of grain, flour and meal by 7 million tons, of potatoes, vegetables and fruits by more than 3 million tons, and of imported goods by 5.5 millions tons.

All railroads coped with overall freight handling. And all of them, with the exception of the Odessa, Transcaucasian and Kemerovo Railroads, fulfilled their socialist obligations.

In September, however, the plan for shipments was fulfilled under great stress. Thirteen railroads did not cope with the plan. Among them, the Southern, Azerbaijan, Transbaykal, East Siberian, Volga, Sverdlovsk and Dnepr Railroads failed to meet the plan by only a few operating hours.

During the nine months, the plan was not wholly accomplished for shipments of highly important freight: timber shipments were short by 2.2 million tons on the Northern Railroad, 900,000 tons on the Sverdlovsk Railroad, 700,000 tons on the Gorkiy Railroad, 550,000 tons on the October Railroad, 530,000 tons on the Krasnoyarsk Railroad and 300,000 tons on the East Siberian Railroad. Oil shipments were short by 376,000 tons on the Volga Railroad and 447,000 tons on the Kuybyshev Railroad. Shipments of refractory materials fell short of plan by 78,000 tons on the Southeastern and Sverdlovsk Railroads, by 59,000 tons on the October Railroad and by 311,000 tons on the Donetsk Railroad. In chemical and mineral fertilizers the Sverdlovsk Railroad was short by 456,000 tons, the Gorkiy Railroad by 428,000 tons, the Transcaucasian Railroad by 82,000 tons, the Volga Railroad by 75,000 tons, the Central Asian Railroad by 68,000 tons and the Far Eastern Railroad by 59,000 tons. In a number of cases the shortfalls were the fault of the freight forwarders.

Although on most railroads the growth rate of total freight handling for the current period exceeded what was planned for the year, it was below the year average on the Odessa, Tselina, Central Asian, East Siberian and Transbaykal Railroads.

The quality of transportation services is still not at a high level. Freight nomenclature was not strictly maintained. Some railroads fulfilled their shipment plan by short hauls of construction materials and other freight. But it is well known that a lag in the plan of just one cargo can have a negative impact on the operation of enterprises and on the startup of facilities under construction of the country's national economy.

The level of block-train shipments in the network amounted to 44 percent, which was slightly above last year's level. The level of block routing was highest for shipments of iron and manganese ore, oil and oil products, shale and hard coal, fluxes of nonferrous ores and raw sulfur. However, the level of block routing for deliveries of some goods declined, even in comparison with what was achieved in the same period last year.

Static load increased by 310 kilograms, which made it possible for the network overall to ship more than 18 million additional tons of freight without any additional use of the railcar inventory. It declined, however, for shipments of ferrous scrap metal, metal structures, nonferrous metals and salt. The utilization of railcar tonnage and capacity worsened on several railroads, including Moscow, Transcaucasian and Transbaykal. There were many instances of overstating cargo weight and of outright falsification. We must set up a system everywhere so that no signs of eyewash or window dressing will be tolerated.

Freight turnover amounted to 2.875 trillion tariff ton/kilometers. This was 2.9 percent above plan and 4.6 percent more than in the same period last year. The entire growth was achieved by increasing the volume of shipments. The Dnepr and Donetsk Railroads did not fulfill their plan for freight turnover.

The average length of freight haul stayed on the whole at last year's level. For some cargoes it increased significantly, specifically for hard coal, coke, peat, refractory materials, fluxes, crushed slag, combined feeds and perishable foodstuffs. For many cargoes, however, average haul declined, including for grain, iron and manganese ore, ferrous metals and mineral fertilizers.

Passenger turnover was 302 billion passenger/kilometers. This was a growth of 10 billion (3.5 percent) as against the plan, and 13 billion (4.4 percent) as against last year. The Moldavian, Dnepr and Transcaucasian Railroads did not meet their passenger turnover plan. The quality of passenger traffic leaves room for improvement. There are shortcomings in passenger service at stations and along the way, and progress has been slow in eliminating shortcomings in the preparations of railcars for trips. In September there was a considerable worsening of the timetable on the Transbaykal, Northern, Moscow and Southern Railroads.

Average daily railcar dispatch increased by 4.5 percent. However, this task was underfulfilled by 2.5 percent, and by 5 percent for loaded cars. With an abundance of transit railcar traffic, loaded car dispatches were below norm on the South Urals, Kuybyshev, Gorkiy, East Siberian, Alma-Ata, Krasnoyarsk and Kemerovo Railroads.

Railcar turnover was 9.1 hours faster than in the same period of last year. Demurrage was lessened at servicing centers and for loading operations. Established norms for railcar turnover and productivity were fulfilled and improvement was achieved on 22 railroads. However, 10 railroads did not fulfill their assignment for railcar turnover and productivity, and on the Transcaucasian and Krasnoyarsk Railroads these indicators were worse than for the same period of last year.

For the network overall, locomotive productivity improved by 3.9 percent. It increased on all railroads except the Gorkiy and Transbaykal. The plan assignment, however, was underfulfilled by 3.5 percent. Only the Azerbaijan, West Kazakhstan, Tselina, Kemerovo, Krasnoyarsk and Baykal-Amur Railroads properly met this important indicator. This lag was due to shortcomings in organizing the utilization of locomotives, as well as in their maintenance, in an increase in nonproductive demurrage at turnover stations, and in the registration and shift assignment of locomotive crews. The time that electric and diesel locomotives are actually moving is clearly inadequate. This has a negative effect on the yield of this expensive equipment.

Average train weight increased by 68 tons. The collectives of the October, Belorussian, Southwestern, Lvov, Donetsk, North Caucasus, Southeastern, Tselina, Kemerovo, East Siberian and Far Eastern Railroads successfully met the plan for this important indicator. However, the Baltic, Gorkiy, Alma-Ata, Central Asian, Sverdlovsk and Azerbaijan Railroads did not fulfill the plan. On the Azerbaijan Railroad, train weight even decreased by 21 tons as against the corresponding period last year.

Train timetables were more strictly met this year. In comparison to the same period last year, the departures, time en route, and arrivals of passenger trains



improved by 1.4, 3.3 and 7.9 percent, respectively. For freight trains on the network overall, departures improved by 1 percent, and time en route by 4.2 percent, but the overall level came to only 75.4 percent.

In September the freight train schedule for time en route was realized by 75.3 percent. On 10 railroads it was fulfilled by 62-64 percent. This was due mainly to shortcomings in organizing train traffic and maintaining technical means.

The industrial enterprises of the Ministry of Railways coped with their assigned task of producing freight equipment. However, the plan for output was not achieved by the plants of the Subways Main Administration and the Electrification and Power Resources Main Administration, and the plan for net standard output was not achieved by the enterprises of the Worker Supply Main Administration. The plants of the Rolling Stock Repair and Spare Parts Production Main Administration also had lower rates of output for the third quarter. Where 12 plants were behind in the first nine months, 24 were behind in the third quarter.

Overall, contract delivery commitments were 1.2 percent behind plan. Thirty-six plants of the Rolling Stock Repair and Spare Parts Production Main Administration had allowed a considerable lag, as had several plants of other main administrations and enterprises of individual railroads.

The plan for in-plant repair of freight cars was fulfilled by 101.3 percent and exceeded last year's level by 4.3 percent. The Baku and Tselinograd plants did not meet their established plan. The plan for capital repair of passenger cars was fulfilled by only 97 percent. Nine out of 17 plants failed to meet the plan.

The material-technical base of rail transport was further developed. Capital allotted was targeted mainly at improving the traffic and freight capacity of the railroads and rebuilding existing enterprises. The October, Baltic, Odessa and Dnepr Railroads, where utilization of the annual funding limit reached from 74 to 80 percent, were better than the other railroads in carrying out the capital construction program.

About 4.6 billion rubles of state investment were utilized--an increase of 5.7 percent. The investment limit set for this period was 95 percent utilized. Limits were not utilized for construction on the BAM and on double-tracking, or for building non-production facilities.

Funds for construction and installation operations of the organizations of Mintransstroy [Ministry of Transport Construction] were used less well than last year. In September this deficiency increased still more. The trusts in Kazakhstan, Central Asia, the Volga area and the South are especially behind in making use of funds.

During the nine months, the construction organizations of the railroads failed to utilize 25 million rubles. Out of 36 trusts, 16 met their assignments. The situation on the Volga, Baltic and Kuybyshev Railroads is particularly bad.

The plans for starting up electrified sectors and equipping centrally electrified switches were not fulfilled. The situation is poor regarding the construction of social and community facilities. There were 132,000 square meters of living space not turned over. Of this, 105,000 square meters were the fault of Ministry of Transport Construction organizations.

Put into operation in the nine months were 491 km. of new rail lines, 1,134 km. of automatic blocking and centralized traffic control, 1,282 km. of communications cables and 474 km. of double-tracking.

Labor productivity for the network increased by 8.2 percent compared to the same period last year. The planned increase was only 2.1 percent.

The number of workers engaged in shipping was reduced by nearly 70,000. All of the railroads fulfilled their plan and socialist obligations for increasing labor productivity. The greatest increases occurred on the Southern (12 percent), Alma-Ata (11 percent), Moldavian, Odessa, Lvov and Moscow Railroads (all about 10 percent). In the final months, however, the Donetsk, Transcaucasian, Volga and Baykal-Amur Railroads did not meet their assignment for labor productivity, and even reduced this indicator to last year's level.

Average monthly wages for workers engaged in shipping increased by 3.8 percent and amounted to almost 230 rubles. For the network as a whole and for all the railroads except the Transbaykal, the proper ratio between the rate of increase in wages and labor productivity was maintained. In the final months, however, certain railroads, in particular the Northern, Donetsk, Transcaucasian and Volga Railroads, allowed the proper ratio to be upset.

There was improvement this year in the organization of labor and the use of worker time at the railroads' enterprises. Overtime was reduced by 16.5 percent, and downtime by 20.5 percent. Losses in worker time from absenteeism were reduced by a third, and infractions in the work and rest procedures of locomotive brigades were reduced by a factor of 2.3. Personnel turnover was reduced on all railroads except the Central Asian, Transcaucasian and BAM. Moreover, there were still many shortcomings in organizing the labor of railroad workers.

Railroad workers are now approaching a very responsible and intense stage in their work. In connection with the end of the agricultural season, the volume of shipments of perishable goods is very great. There is a stream of fuel-energy and ore-metallurgical freight for the operation of enterprises in wintertime, and the economy is completing preparations for operating in cold weather. In this situation it is therefore essential to mobilize all forces so that the stepped-up tasks designated for the basic volume and technical-economic indicators for the fourth quarter will be successfully fulfilled. This will make it possible to cope honorably with the assignments and socialist obligations for 1986, the first year of the 12th Five-Year Plan.

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CSO: 1829/31

4 December 1986

## RAIL SYSTEMS

## MINISTRY EVALUATES NINE-MONTH RAIL SECTOR PERFORMANCE

Moscow GUDOK in Russian 29 Oct 86 pp 1-2

[Article: "Accelerate Restructuring--Expanded Meeting of the Ministry of Railways (MPS) Collegium"]

[Text] As reported in GUDOK, on 23 and 24 October there was an expanded meeting of the Ministry of Railways Collegium. The chiefs of the railroads and of several divisions participated.

On 24 October the railroad managers and the members of the Collegium were received at the Kremlin by member of the CPSU Central Committee Politburo and Chairman of the USSR Council of Ministers N. I. Ryzhkov. During the meeting, in which member of the CPSU Central Committee Politburo and First Deputy Chairman of the USSR Council of Ministers G. A. Aliyev participated, measures were decided on that were aimed at further improving transportation services for the national economy and the country's population in the light of the resolutions of the 27th CPSU Congress. Of central interest were the restructuring of the sector's work, improving its efficiency by accelerating scientific and technical progress, and improving the methods of management and the economic mechanism.

Presenting reports at the expanded meeting of the MPS Collegium were Chief of the Economic Planning Main Administration V. A. Shevandin, Chief of the Accounting and Finances Administration A. G. Kovrigin, First Deputy Chief of the Railway Traffic Main Administration A. Ya. Sidenko, and Deputy Minister of Railways and MPS Chief Traffic Safety Inspector S. I. Solovyev. They, along with other managers from the ministry and the railroads taking part in the discussions, critically analyzed the results of rail transport operations for the first nine months, uncovered shortcomings and miscalculations, and discussed ways of getting rid of them as soon as possible in order to successfully fulfill the assignments for the first year of the 12th Five-Year Plan and arrive at the high benchmarks designated in the socialist commitments of the sector's workers.

The Chief of the Department of Transportation and Communications of the CPSU Central Committee V. S. Pasternak took part in the meeting of the Collegium.

Taking part in the work of the MPS Collegium were Sector Chief of the Department of Transportation and Communications of the CPSU Central Committee P. D. Monyakin, Chief of the Department of Transportation of the Administration of Affairs of the USSR Council of Ministers K. V. Kulayev, Chairman of the Central Committee of the Rail Transport and Transport Construction Workers' Trade Union I. A. Shinkevich, executives from USSR Gosplan, from the USSR Committee of People's Control and from several ministries and departments, and the managers of the party and trade union organizations of MPS main administrations.

In opening the meeting of the Collegium, Minister of Railways N. S. Konarev stressed that the sector's workers are faced with three main highly important tasks. The first is to meet the requirements of the national economy and the population for shipping completely and on time and to firmly carry out the plan for all types of freight. The second is to attain in this five-year plan the world's highest benchmarks in volume, quality, and economic indicators, and above all in labor productivity. The third is, by putting to work all the resources available to the sector, to substantially elevate the material well-being of railway workers and to do the utmost to improve their working and living conditions.

Proceeding from these tasks and the party's requirements, the work results for rail transport were analyzed for the last three quarters. The plan for freight forwarding was fulfilled ahead of time, on 24 September. About 80 million additional tons of various kinds of national economic goods were shipped. Plan targets were achieved for passenger turnover, labor productivity, shipping costs, and most indicators for the utilization of rolling stock (a detailed survey of work for the first nine months was published in GUDOK on 23 October). Along with the overall positive results, however, substantial shortcomings were tolerated, which had a negative effect on operating efficiency, especially in September. The rate of shipping achieved in the first half of the year dropped off. Another cause of concern is the unfavorable situation regarding the safety of train traffic and instances that have occurred of operating breakdowns, accidents, and wrecks, which are evidence of slack discipline on several railroads. Much criticism has been justified by mistakes in organizing passenger traffic, poor service at stations and on trains, and failure to maintain schedules.

Participants at the meeting spoke with indignation of cases of eyewash and falsification and of commanders who attempt with the aid of pencils alone to embellish their work and even to obtain bonuses. This anti-state and criminal practice was roundly denounced. The effectiveness of control is being strengthened and increased so that nothing like this will happen again. The impicable campaign against figure-padding must not be allowed in any way to negatively affect the mobilization of actual resources. Can we be complacent that in the third quarter static load was 450 kg lower than for the same period last year? As a result, 155,000 additional railcars had to be enlisted. That is equivalent to a loss of shipping resources for 8.5 million tons of goods. On the Moscow Railroad static load dropped by nearly two tons, and on the Transbaykal by one ton. But there are many genuine resources for better exploiting railcar capacity. Simply because of failure to utilize increased car capacity to 73-80 tons, resources were lost that would have made it possible to forward an additional 1.3 million tons of various goods every month.



We must eliminate the conditions that create fertile soil for figure-padding. Transportation weighing facilities are far behind vital requirements. We are long overdue in seriously dealing with the production of up-to-date, accurate scales that will make it possible to weigh railcars in motion and automatically record the required data. In our age is this really an insoluble problem?

The rhythmic and efficient operation of the country's national economy requires that all railroads, divisions and stations fulfill their plan every month for all types of freight. And it is certainly impermissible that the plan was not met by 8 railroads in June and 13 in September. It is a vicious practice to fall substantially behind plan in the first 20 days and then start a crash program in the last three or four days. This creates irregularity in supplying enterprises and in the operation of the railroads themselves.

In the first nine months customers failed to receive 1.2 million tons of timber. It is not hard to imagine the effect of this on housing construction and furniture manufacture. And what will the Soviet people say about the lack of responsibility of transportation workers on the railroads where this timber is lying and rotting, and where by regulation they should be collecting and dispatching empties to the timber-shipping trunklines? The chiefs of some railroads, particularly Moscow and October, even attempted at the Collegium meeting to justify objective reasons for the breakdowns in their regulatory assignments.

Executive discipline is still too low. MPS main administrations produce a multitude of documents and seem to believe that these have some magic power. The Railway Traffic Main Administration sent dozens of documents to the line about those shipments of timber products. But it poorly handled the specific organization of the matter. There is no effective systematic monitoring of decisions that have been reached. This is the result. You would think that with a shortage of rolling stock on the timber-shipping railroads, they would have to utilize whatever cars there were. But what happens? On the Transbaykal, West Siberian and Baykal-Amur Railroads, regional load size clearances are utilized by only 30-40 percent.

Railroad workers must recognize that their mistakes not only seriously disrupt the normal functioning of the economy, but also have extremely undesirable political and social consequences. It is well known how people react when late deliveries and poor use of refrigerator cars cause spoilage of fruit, vegetables and other goods in short supply in stores, and which were grown with so much labor! It is not hard to imagine what will be said about railroad workers by the workers of enterprises to which, because of bungling, there are irregular deliveries, and workers have to be taken off their main job to unload them. Or about late deliveries of fuel, which determines whether it will be warm or cold in the winter at enterprises and in apartments? All of this affects people. Not to mention all the disorder in the organization of passenger traffic. This means that railroad workers, and commanders above all, must have the highest sense of responsibility toward their assigned tasks.

The restructuring targeted by the 27th CPSU Congress will lead to the most serious changes in the economy and in the life of the entire society. It was noted at the Collegium meeting that, unfortunately, in the ministry bureaucracy and on the railroads **this** word is misused and employed both in place and out of place. And in practice restructuring is going on at a slow pace. At times it gets bogged down in verbiage and in endless documents, conferences and meetings.

At the MPS Main Computer Center an automated system has been set up and put into operation to monitor daily shipments by 4,000 industrial enterprises. Displays have been set up to present information. Programs and instructions have been developed and sent to the field. Now six months have passed. There is still no reliable information. The railroads simply do not know in detail the state of affairs at each of these enterprises, although this is very important for effective management of the shipping flow.

How can we seriously talk about restructuring of the ministry system, when at times they shelve or extend without authority the work deadlines specified by directing agencies. It is well known how very important it is to develop the natural wealth of Western Siberia. A short deadline was therefore specified for increasing the throughput capacity of the Tyumen-Tobolsk-Surgut line. But the Ministry of Railways decided that the deadline could be postponed.

There are serious shortcomings everywhere in the organization of capital construction, which until recently they attempted to conceal by eyewash and figure-padding, especially when starting up newly built lines and electrified sectors. The Committee of Party Control of the CPSU Central Committee has had to deal particularly with the investigation of these matters and to severely punish the guilty executives.

In preparing annual and five-year plans MPS managers always try to obtain more funds for capital construction. And the material-technical base of railroad transport is actually in need of rapid development and reconstruction. However, even the funds allotted are not being fully utilized. In the past nine months more than 79 million rubles allocated for construction work were unused. The national economy's construction complex is undergoing major restructuring, but in transportation this is proceeding at a slow pace.

There are many major shortcomings in preparing facilities and personnel for winter and ensuring the required equipment reliability. On many railroads the specially created staffs are not playing their organizing role, and have not dealt with those guilty of committing mistakes. For a long time on many railroads, especially the Southwestern, Lvov and West Siberian, notices on reducing speed have been in force. In the network as of early October there were about 2,200 notices not called for in the timetable.

And what losses were incurred from the more than 80,000 uncouplings of defective locomotives from transit trains? Traction equipment, which is the most active and expensive part of basic transportation resources, is still being poorly utilized everywhere. About 600 additional electric and diesel

locomotives have had to be retained in the inventory daily and the pool of engineers and their assistants has had to be increased by 4,200 as a result of failure to achieve the assigned locomotive productivity. The railroads are also in a fever as a result of frequent uncouplings of defective railcars, and breakdown of STsB [signalization, centralization, and block system], communications and electrification facilities. Somewhere in the network on an average of 16 times per hour there is a disruption of normal operation as a result of malfunction by signalization and communications equipment. This sometimes leads to derailments and accidents.

The Collegium meeting devoted much attention to disseminating the Belorussian Railroad experience and to restructuring managerial methods on the example of the Southwestern and Dnepr Railroads. It is gratifying that this very important economic indicator -- labor productivity -- has assumed a high growth rate. This growth rate of eight percent must be consolidated and just as decisively advanced further. Improvement in the technology and organization of production in all components of our highly diversified industry must be targeted to do this.

The Belorussian Railroad workers believe that the management of line locomotives must promptly be transferred to a single person and that there must be more extensive combining of jobs, and this has been confirmed in practice by their own experience. The conversion to new methods of managing rail transport and, in the very near future, to complete self-support and self-financing, calls for fundamental changes in planning, radical improvement in the system of indicators, adoption of stable and soundly based norms, and genuine zeal in running things. Losses are still much too high. Losses reached 13.5 million rubles in seven months of this year just because of freight losses in shipment. Is it really economical to keep above-norm physical assets worth more than 1.8 billion rubles, and to store uninstalled equipment worth many millions?

The Collegium meeting strongly criticized the MPS railroad and main administration executives who have not shown the proper concern about improving the work and living conditions of railroad workers. Despite the exceptionally acute housing problem in the transportation industry, the MPS target program of building 200,000 apartments in five years has so far not been performing satisfactorily. The total amount of living space turned over to railroad workers in the first nine months was 130,000 square meters short. The situation with the performance of the communal construction plan is even worse.

The South Urals and several other railroads have set up regular traffic for consumer goods trains. But in many places these are being organized at a slow pace. Things must be arranged so that without any special pains workers who live on the line can get everything they need on these trains, right up to tools and construction materials. Railroad workers have a good understanding of what their commanders can do for the well being and comfort of working people. And they are not asking for the supernatural or the impossible. A real executive always knows of the concerns and needs of his subordinates, takes a continual interest in how his people are living, and does everything he can so that their lives will be better, more comfortable and more interesting.

The Collegium meeting emphasized that rail transport is in possession of reliable cadres of workers and specialists, a powerful production base, and rich traditions, all of which are a good foundation for rapid restructuring, raising all work to a new and much higher level, and successfully carrying out the great and complex tasks assigned by the 27th Party Congress.

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*21 Dec. 1986*

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